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RURAL HEALTH CARE

HEARING

BEFORE THE

COMMITTEE ON THE BUDGET
UNITED STATES SENATE

ONE HUNDREDTH CONGRESS

SECOND SESSION

GREENVILLE, NC
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RURAL HEALTH CARE

MONDAY, MAY 2, 1988

U.S. SENATE,
COMMITTEE ON THE BUDGET,
Greenville, NC.

The committee met, pursuant to notice at 10 a.m., in Greenville, NC, Hon. Terry Sanford presiding.

Present: Senator Sanford.

Staff present: Judy Love, legislative assistant; Mary Ann Triplett, State field director; and Alice Glover and Waverly Land, assistants.

OPENING STATEMENT OF SENATOR SANFORD

Senator SANFORD. I call to order this official meeting of the Budget Committee. The proceedings will be recorded, and made a part of the budget reports that will go into guidance of those who are trying to improve various aspects of Federal programs that relate to rural life.

Today, I might say the Budget Committee is the one place in the Senate and in the Congress where priorities are set. Now, it's not done as precisely as I would like to see it, but that's where we can set priorities. That's where we can direct the expenditures, and with that, set priorities.

So that's the purpose of having hearings, to establish where we ought to go in setting priorities that will bring into better focus the programs that originally were intended to be helpful to rural areas.

I thank all of you for coming. The official transcript will go beyond the Budget Committee, to the Senate Finance Committee, the Labor and Human Resources Committee, and perhaps to the Agriculture Committee, because there's no one place in the Congress that concerns itself with rural life, nor should there be, because rural life cuts across almost all of the programs and concerns of the Federal Government.

I asked the chairman of the Budget Committee, Senator Lawton Chiles, to hold this hearing on rural health care because there's no more important issue before Congress today than ensuring access to quality health care for every citizen, rich or poor, whether they live in one of our cities or whether they live in the rural areas of the country.

For decades, the cost of health care has out-paced the rate of inflation. Since 1972, its increase has nearly quadrupled that of the Consumer Price Index. While this is a national problem, it places more of a burden on our rural communities at a time when rural communities are generally declining. So it's a great concern.

Health expenditures represent the third largest category in the Federal budget, after defense and social security. Moreover social security is a separate trust fund that is technically not in the budget, so we could say that health care is the second largest expenditure, after national defense only.

Yet medical services have concentrated to the point where it is harder for those not living in urban areas to get the best care. The Federal Government generally looks upon health care disease by disease, or as an income subsidy issue, rather than by geographic location.

Yet there are large numbers of people in certain geographical areas who are not able to get quality medical care, either because it is too costly or because it is not available.

With the growth of our cities, and the demand for specialization and advanced technology in medicine, it is very difficult to focus attention on the disparity between Federal health care assistance to urban areas and rural areas.

Instead, we speak in terms of categorical programs or block grants or reimbursements rates. There are only two Federal health programs focused primarily on the special needs of rural America: the National Health Service Corps and the Rural Health Research Program. These two programs represent less than one one-hundredth of all Federal health expenditures.

So rural areas haven't been getting proper attention and haven't become a priority of the Federal Government.

The purpose of this hearing is to focus more attention on the special health care needs of rural America. I should point out that the Senate Budget Committee has never held a hearing to look specifically at rural health care, so this hearing is long overdue.

The health care problems in the rural areas of this country are many, and the range is broad. Medicare reimburses rural health care providers at a lower rate than larger providers in urban areas.

Yet that small, rural provider is often less able to absorb a lower payment, which is frequently below the actual cost of the service provided. The amount of uncompensated care is increasing, further exacerbating the problem for those of our rural communities least able to pay the differences needed to provide vital health care services.

Some declining rural communities have an oversupply of underutilized care, while other communities have too little.

How do we attract and keep good health care providers in our rural areas? How do we confront the reality that as rural populations shrink, more of our rural hospital beds go unfilled? How do we deal with the dramatic increase in malpractice insurance costs that prevents a growing number of rural physicians from delivering babies?

How is the nursing shortage impacting the delivery of health care in rural communities? How do we pool our resources to provide better health care services more efficiently in rural areas? How do we provide more services in our underserved areas?

We are not here this morning simply to talk about problems. We are here to start talking about solutions. We are here to talk about solutions that might be taken back to Washington and put through the legislative budget process.

Innovative programs and changes taking place in rural North Carolina serve as examples for the rest of the country. These examples and changes can contribute to meeting the changing health care needs not only in North Carolina, but everywhere.

Badly needed changes are already being made at the Federal level. Last year's budget reconciliation enacted numerous changes in Medicare policy that will increase reimbursement rates to rural physicians, clinics, and hospitals, which will improve rural health care delivery.

It authorizes rural health care transition grants for small rural hospitals to plan and implement changes to improve health services. It also requires that more research and demonstration funding aim specifically at programs related to rural health.

There must be a commitment at the Federal and State levels to ensure that our rural communities deliver necessary quality health care services. We must find that delicate balance between fiscal responsibility and maintaining adequate access to quality care in the rural parts of America.

I'm delighted to have this opportunity to learn more about rural health care from a distinguished group of health care professionals here in North Carolina.

Congressman Martin Lancaster, who is doing an outstanding job, in my opinion one of the best in Washington, representing his district. He was scheduled to testify here this morning, but unfortunately for us, the House of Representatives is in session and voting today, and he is unable to be with us.

We will include his testimony as a part of the record. And you can be sure that he will be very much involved in our efforts in Congress to focus the attention on the rural aspects of health care.

[The prepared statement of Congressman Lancaster follows:]

TESTIMONY OF CONGRESSMAN H. MARTIN LANCASTER

Mr. Chairman, and members of the Budget Committee, I thank you for allowing me to testify on some matters of concern involving rural medical care in the Third Congressional District of North Carolina.

I will discuss briefly three matters with which I am particularly concerned: (1) The deplorable insensitivity and incompetence of the Atlanta office of the Public Health Service as it relates to a proposed forced merger of the Goshen Medical Center and Plain View Health Services; (2) the impact of the overflow of military retiree and military dependent patients on rural medical facilities in my district caused by a shortage of Navy medical personnel; and (3) the problems caused by a differential in reimbursements for medical services at urban and rural hospitals.

I. As a freshman member of Congress, I have become acutely aware of the personal nature of health care delivery. There are few things in life that are so personal and sensitive to an individual as the type of health care he or she receives.

Over the last several years there have been a number of moves by federal and state agencies to consolidate the delivery of rural health care administrative units to foster a more streamlined management system. In some cases, such a move may be wise. The key aspect, though, of these consolidations must be to amicably bring together members of various communities and work with guidance from Atlanta and from the North Carolina Office of Health Care Development to establish a positive and forward looking administrative operation.

Merger, though, may not be easy, and I have seen first hand the insensitivity and administrative heavy-handedness of the Atlanta office of Public Health Service in dealing with two clinics in my congressional district.

I have a file about five inches thick which details the series of misrepresentations by Atlanta, failures of communication, lack of sensitivity and administrative incompetence that is indeed shocking.

A little bit of background on these clinics: Plain View Health Services is located in a rural, significantly minority section of Duplin County. Over the years, Plain View has not been continuously funded by Atlanta for an administrator, and therefore there were times when problems in documenting that the clinic had met all criteria established by Atlanta. Goshen Medical Center is located in a community made up primarily of white residents with a high, seasonal migrant patient census. Goshen has always had a funded administrator.

In 1986, Alex Dobson came on the scene as acting administrator for the Plain View clinic. Their numbers improved dramatically. Things were looking up at Plain View. In a letter dated November 17, 1986, Dr. Otis Bowen, the Secretary of Health and Human Services, said that Plain View lacked administrative staffing and that it was experiencing a decline in patients. This letter was not based on current statistics, but on the situation before Mr. Dobson arrived.

Plain View had requested administrative staffing in 1984, but they were denied. Of course it is hard to have an effective administration if funding for the positions is not granted.

In November, Dr. Otis Bowen ordered that Plain View Health Services and the Goshen Medical Center would be merged into one facility.

Dr. Bowen also said that the initial discussions concerning a reorganization of health care service in Duplin County had been held. Some discussions had been, but there was never any discussions of a merger. There was, in fact, a discussion of a consortium in which all delivery groups would remain independent. That idea never came to fruition but that was the basis on which Atlanta and Washington decided that a merger was the way to go.

Dr. Bowen also stated that the Plain View board did not submit a proposal for continued funding for the period beginning October 1, 1986, which was due in the Atlanta regional office on June 1, 1986,

A letter dated October 24, 1986 from Dr. Bruce Brasher, who was medical director at Plain View, describes the conversations of the Office of Rural Health in North Carolina and in Atlanta. Dr. Brasher, in his letter, states that there was a veteran agreement with Atlanta and Rural Health of North Carolina that the submission of the grant applications would be delayed until the consortium discussion was concluded. Once it became apparent that the consortium would not fly, the rug was pulled out from Plain View, saying they did not submit a grant application on time.

From that date in late 1986 until now there has been a series of administrative edicts, unclear and vague directions from Atlanta, conflicting statements by members of the Atlanta staff, and in my opinion, an unwillingness to be responsive to the people familiar with the community, to work sensitively to ensure adequate heath care is delivered through the Plain View facility. Atlanta has never been responsive since I became a member of Congress to my or to Plain View's request for further consideration of independent funding. In fact, they have not even been civil.

Geographically, the two communities are better than an hour's drive apart. They are at the extreme geographic ends of a large county. Goshen provides health care to the northwest of the county; Plain View provides health care services to the southeast. The historical, social and political differences between these two communities are significant. Both centers provide a much-needed medical delivery system. Atlanta has failed to adequately understand the different natures of Goshen and Plain View. I can assure you that neither of these groups is willing to merge or want to merge at this time. Under the very best of circumstances a merger of these different clinics would be difficult; since Atlanta and Washington have created such a mess, it is now impossible. I do not believe that there is a way to work out an amicable agreement between the two groups in the near future.

The main issue here is the delivery of health care. Plain View and the citizens of the Greenevers community are worthy of Atlanta's full support. Plain View has never received any significant support. A minority community that with only faith and hard work has built a facility and has worked to provide quality health care to the poor rural residents of that community, has a very dim and negative view of the heavy-handed any incompetent administration by the Atlanta office.

To top it all off, just recently, Dr. John D. Whitney, Bob Jackson and others from the Atlanta office came to North Carolina to begin to work out an agreement concerning the physical facility at the Plain View Center. In the newspaper that morning, there was an announcement stating that an agreement had been reached and that there would be a contract signed later that day concerning the facility. The Plain View citizens and board had never seen the contract. They were extremely upset to learn through the newspaper that they were expected to sign a contract that they had never heard about, much less seen. On top of that, one of the officials of the Public Health Service had forwarded a list of recommendations that had been

submitted to Dr. David Sundwall concerning this matter. A copy of those recommendations had been provided to the Plain View leaders but had not been provided to the Goshen board. Goshen found out about this, and, of course, they were very disturbed that one facility was receiving special treatment.

Again, I state that the key issue here is delivery of health care services. That should be Altanta's goal too. However, that appears to be of no concern to them. In my entire career in public life, I have never seen such totally insensitive, noncommunicative, underhanded and incompetent management as has been displayed by the Atlanta office.

II. My staff has talked at some length to health care providers in the general area around Camp Lejeune to determine the impact of the gross understaffing of the Naval Hospital at that base which has led to almost all retiree and dependent care being forced into the community health care system under CHAMPUS.

Though these providers welcome the higher patient load and the CHAMPUS reimbursement, they are overworked and uncertain about the future. They are reluctant to recruit additional physicians and build additional facilities not knowing if the patient load will continue high or if the Navy will ultimately meet the commitment to the rightful beneficiaries of free, Navy medical care. They are often also frustrated by the slowness of the reimbursement and the sometimes arbitrary denial of reimbursement.

The hospital is under pressure to build additional facilities (particularly OB–GYN) but cannot justify going to their taxpayers to get the funds to care for patients who are the military's responsibility unless the Navy is willing to make a long-term commitment to continue a high level of patients who will use the space.

III. Mr. Chairman, I would now like to mention briefly my concern with another aspect of rural medicine in my district.

I am a member of the House Rural Health Care Coalition. This bipartisan forum for Members of Congress from predominantly rural districts works for legislation that will improve our constituents' health care and to sensitize our colleagues from urban districts as to the needs and concerns of rural health care providers.

Last Wednesday, the Coalition outlined its agenda for 1988. The first priority is that of eliminating the urban/rural differential in hospital and physician reimbursement. In discussions with hospital administrators from the Third District, I have found the inequity of the Medicare Prospective Payment System (PPS) to be critical in the hospital's ability to survive, and in so doing, serve the rural community.

It is unfair for our senior citizens in rural areas to be shortchanged in access to quality health care. I feel that there are factors such as severity of illness and the variations in local labor costs for all hospital personnel that should be considered for a more accurate measure of costs incurred.

In further discussion of this differential, the coalition's legislative agenda includes requiring that the Secretary of Health and Human Services have the discretionary authority to grant adjustments to hospitals that are considered "border" hospitals, or those in a rural area, but located adjacent to Standard Metropolitan Statistical Areas (SMSA's) which can show that the costs incurred are in keeping with urban health care costs.

I represent a district where several hospitals, if moved a few miles, would be designated "urban" and yet they must compete with their urban neighbors if they are to obtain and keep professional and non-professional personnel who can easily drive across county lines to receive higher hourly earnings. The recruitment and shortage of professional personnel and fairer treatment of "border" hospitals must be addressed now.

I will continue to listen to constituents, hospital administrators and providers in an effort to effect legislation that will work towards a more equitable and affordable health care policy. Rural or urban, health care is and will continue to be a growing issue affecting us all.

Senator SANFORD. I'm so pleased to be at East Carolina University, and especially at the School of Medicine. I remember the great struggle to change the name initially to East Carolina College to the investments that we made here to make this an outstanding university, to broaden its curriculum, to upgrade the faculty by increasing salaries, and doing things to make it a first-class institution. This helped to develop an academic and scientific base to support a medical school.

And as I drove up here today, looking at this magnificent set of buildings, I thought back to the hundreds and hundreds of people here who worked so hard to make this institution and this medical school and medical center a reality.

I'm certainly pleased to have Dean William Laupus with us this morning to welcome us to the University School of Medicine. As past vice chancellor of this university and dean of the medical school, he certainly is heavily involved and no stranger at all to rural health care issues.

Without his efforts and persistence, certainly the quality of this institution would not have advanced so rapidly and remarkably as it has. I'm so pleased to be here this morning with Dean Laupus.

STATEMENT OF WILLIAM LAUPUS, DEAN, SCHOOL OF MEDICINE, EAST CAROLINA UNIVERSITY

Mr. LAUPUS. Thank you very much, Senator Sanford. It's a real privilege for me to have this opportunity to have you hold a special committee on the budget hearing here today, to discuss the condition of health care in rural America.

The School of Medicine here as you've pointed out, does have a very special interest in the rural activities of North Carolina.

The contributions made over the last 20 to 30 years, of East Carolina University, in education and other facets of this, are well worth mentioning. The founding of the medical school gave us another way of serving in this area, with the development of health care as a major issue.

We have played a strong role here in several ways. The first of these has been an emphasis on the production of primary care physicians. We have one of the best records in the United States for the percent of our classes going into family medicine.

The second has been to develop a regional health care system, to serve the needs of eastern North Carolina, and to give them an alternative to going much longer distances for care, as had been true over the years.

And we're pleased that this has had the opportunity to develop. Through Walter Shepherd's office, and now in my latest set of duties in the Division of Health Sciences, and through the School of Nursing and the School of Allied Health, we have had other opportunities for service in these areas.

So it's a special occasion for us to have you here. We think it's a very appropriate place for you to begin your work on rural health care.

So welcome, and have a fine meeting.

Senator SANFORD. Well, thank you very much. We have three panel members, and I'll ask you to come up. And while you're coming up, let me say to the audience that we are very pleased to have a group of some forty nurses who are here today for a workshop on area health education at the Area Health Education Center.

And here to lead that discussion is one of the experts on nursing and nursing care and the shortage of nursing in the country, from the University of California at San Francisco. I would like to ask him to stand for recognition, Dr. William Holzmer.

We are so pleased that you're here to participate and to listen to what we hope will be helpful for all parts of the country. We thank all of you for breaking your schedule to come join us.

Our first panel is made up of health care providers. Dr. Terri Lawler is a professor of nursing at East Carolina University's School of Nursing, and her primary fields of interest are public health nursing, as well as nurse management and administration.

As a member of the North Carolina Nurses' Association, Dr. Lawler chairs the cabinet on Government and Health Policy. She has a realistic grasp of the problems facing the nursing profession today. And I'm certainly delighted that she will be here—is here.

Then Dr. Richard Harrell is administrator of the Duplin General Hospital, a 101-bed hospital located in Kenansville. A native of Duplin County, understands the special health care of—needs of rural communities.

And to help meet those special needs, Duplin General has created a 20-bed skilled care unit, as well as a 20-bed inpatient psychiatric unit. I want to thank you for being here, and for preparing very thoughtful testimony.

Dr. Jane McCaleb has been a practicing physician in Halifax and Northampton Counties for the past 9 years. She came to North Carolina through the National Health Service Corps. That in itself ought to justify the National Health Service Corps.

Dr. Mr. Caleb served as a Corps physician for 8 of those 9 years. She's a native of Missouri, who chose to make North Carolina her home because of its commitment to improving rural health care, and because of her commitment to improving rural health care.

She's made dramatic changes in health care delivery in two of our most rural counties. We're so pleased that she's here, and we are pleased that she is in North Carolina.

Dr. Lawler, we'll ask you to begin, and then we'll proceed in order. And then we will have some discussion on the issues. Dr. Terri Lawler.

STATEMENT OF DR. THERESE G. LAWLER, PROFESSOR OF NURSING, EAST CAROLINA UNIVERSITY

Dr. LAWLER. Thank you, Senator. I appreciate the opportunity today to share some perspectives on the nursing shortage and its implications on rural health.

Nurses are essential health care providers in rural hospitals, health departments, long-term care facilities, mental health centers, and ambulatory care clinics. Without registered nurses, these health care agencies could not continue to provide appropriate or comprehensive patient services. Indeed these agencies are nursing agencies.

In geographically isolated rural regions, limited availability or accessibility to a needed resource often has both serious short-term and long-term consequences. It would appear, then, that the health status of our rural citizens may be compromised if the current nursing shortage is allowed to continue unabated, let alone to grow.

Nursing shortages seem to be cyclic in nature in the United States in the past 40 years. The current problem of increasing va-

cancies in staff nurse positions throughout the country is not surprising, then, given the present socio-environmental influences upon the profession.

Common economic theory tells us that market conditions drive both supply and demand. The demand for registered nurses, particularly those prepared at the baccalaureate level, has escalated due to the rising numbers of older citizens, the complex and sophisticated technology of acute care, the early hospital discharge trend necessitating home health services, and the wide array of expanding career opportunities for nurses within the health care system.

Concomitant with the rise in demand, moreover, is a dwindling pool of young people who are entering nursing. Although the output of nurses in the past 30 years has greatly exceeded the population growth, and the registered nurse work force now numbers about two million, 80 percent of whom do work, the supply is actually dropping in proportion to the demand because of decreasing enrollments in schools of nursing.

Concern is mounting, therefore, since the growing shortage may well be of protracted duration and of distressing proportions. Because nursing is an invaluable national resource, it is imperative that immediate and valid steps be taken to effect long-term remediation for the manpower problem.

Specifically, attention needs to be directed toward recruitment, retention, respite, and reorganization. Recruitment efforts should be targeted toward younger school children in the middle grades, and adults, particularly women, planning midlife career changes.

Models should be developed for cooperative efforts between health care institutions and educational institutions. We have one here in Pitt County which is called "Co-Adventure, A Recruitment Model."

Massive media campaigns promoting nursing as an attractive career should be mounted. External funding is needed for public relations activities of this magnitude.

Retention efforts to foster a supportive work climate for nurses, particularly in the hospital setting, are sorely needed. Hospitals have historically provided impoverished environments for nurses. With good reason, they have often been termed "pink collar ghettos."

Yet the literature is replete with sound strategies of successful programs to retain nurses. For example, we know that decentralized decision-making, participative management styles, clinical autonomy, advancement opportunities, educational support, and an all licensed staff mix contribute to job satisfaction for nurses.

The presence of these organizational attributes, along with higher salaries and sound benefit packages, will retain staff nurses in the acute care setting, where there are now the most vacancies.

Exemplars of health care agencies providing a fine professional ambience for nursing practice need to be funded, studied, and replicated.

Programs of respite for critical care nurses suffering physical and emotional burn-out from sustained high stress in clinical practice should be developed. Critical care is now experiencing the greatest loss of registered nurses.

Mini-sabbaticals, weekend retreats, participation in educational conferences, temporary reassignment to special projects, employee health promotion activities, and/or the establishment of support groups would all be viable strategies to alleviate the high stress level that's encountered in the critical care units.

Further research is required to evaluate the most efficacious ways to deal with stress reduction in nursing.

Finally, the reorganization of nursing education to allow two entry levels to nursing practice is long overdue. Nursing, as a practice discipline, has evolved along the same paths as have teaching, accounting, medicine, law, and pharmacy: from apprenticeship models to 2-year training programs to professional studies housed in a university.

Only the progress in nursing seems to have been constrained by external groups. I believe that it is absolutely necessary to merge the practical nursing programs and the associate degree nursing programs into one, and thus establish a first-level practitioner.

The product, called an associate nurse, would function as a nursing technician in acute and long-term settings. Registered nurses, then, would be prepared only in colleges and universities, and hold the minimum of a baccalaureate degree.

These advanced practitioners would be responsible for all aspects of nursing care delivery in the wide spectrum of practice settings.

Reorganization of nursing education, as has been proposed by the profession, would clarify roles, delineate responsibilities, determine lines of accountability, and most importantly, attract more persons to nursing as a career. Enabling legislation for a revised licensing criteria must be forthcoming.

To support the prescribed initiatives of recruitment, retention, respite, and reorganization, I would urge passage of certain pending bills.

Particularly important is the reauthorization of the Nurse Education Act, Title VIII of the Public Health Service Act, which is Senate bill 2231. This would provide for maintenance of nursing programs through institutional support to the schools, and through financial assistance to nursing students.

Also critical to the shortage problem is the passage of the Kennedy Nursing Shortage Reduction Act, Senate bill 1402, which would fund demonstration projects in recruitment, retention, respite.

A third bill now in the House is the Pursell-sponsored Nursing Research Facilities Construction Act, which would allocate monies for regional nursing research centers. That is House bill 4190, and I'm sure there will be a Senate companion.

All should be passed. If there are not vigorous interventions made by the body politic at this time on behalf of nursing, rural health needs may well go un-met.

In rural areas, such as eastern North Carolina, there are more of the elderly and of the young. More poor, especially the working poor. More individuals at health risk. Higher prevailances of chronic disease. More accidents, disheartening infant morbidity and mortality statistics, and fewer health resources.

Nurses can provide effective and cost-efficient care to geriatric clients, to school children, to pregnant women, to home health patients, among others. Much empirical evidence exists which shows,

for instance, that nurse practitioners who work in health departments are excellent primary care providers.

Nurses also manage care in occupational health sites, do health risk appraisal, offer family counseling and mental health therapy, teach health promotion behaviors, and screen for chronic diseases. All these nursing services are essential to rural residents. They do not deserve less.

To summarize, there's a growing societal demand for well educated practitioners of nursing to meet the complex needs of patients in today's health care systems, particularly in the under-served rural regions.

Decisive action must be taken to recruit the brightest and the best to nursing, to foster a work environment supportive of autonomous nursing practice, and to enhance the capability of already practicing nurses to further their education.

These are means of assuring the quality of care provided the American public. Nursing is essential to the well being of our rural citizens.

I would also like to ask that testimony by Ms. Eloise Jenkins be entered into the record. Ms. Jenkins is an emergency department head nurse at Halifax Memorial Hospital, which is a rural hospital in Roanoke Rapids.

Senator SANFORD. Thank you, we certainly will do that.

[The prepared statement of Dr. Lawler follows:]

THE NURSING SHORTAGE AND ITS IMPLICATIONS FOR RURAL HEALTH

Rural health care is inextricably bound to consumer accessibility to quality nursing services. Nurses are essential health care providers in rural hospitals, health departments, long-term care facilities, mental health centers, and ambulatory care clinics. Without registered nurses, none of these health care agencies could continue to provide appropriate or comprehensive patient services. Indeed in geographically isolated rural regions, limited availability or accessibility to a needed resource often has serious short and long term consequences. It would appear then, that the health status of our rural citizens may be compromised if the current nursing manpower shortage is allowed to continue unabated let alone to grow.

Nursing shortages seem to be cyclic in nature in the United States during the past 40 years. The current problem of increasing vacancies in staff nurse positions throughout the country is not surprising given the present socio-environmental influences upon the profession. Common economic theory tells us that market conditions drive both supply and demand. The demand for registered nurses, particularly those prepared at the baccalaureate level, has escalated due to the rising numbers of older citizens, the complex and sophisticated technology of acute care, the early hospital discharge trend necessitating home health services, and the wide array of expanding career opportunities for nurses within the health care system. Concomitant with the rise in demand, moreover, is a dwindling pool of young people entering nursing. Although the output of nurses in the past 30 years has greatly exceeded the population growth and the registered nurse work force now numbers 2 million, the supply is actually dropping in proportion to the demand because of decreased enrollments in schools of nursing.

To illustrate the dimensions of the current shortage both nationally and in North Carolina, some selected data excerpted from professional associations documents are presented:

TABLE 1.—COLLEGE FRESHMEN INTENDING TO ENROLL IN NURSING

Year	Number	Change
1984	63,257	N.A.
1985	53,321	down 16 percent.
1986	42,846	down 20 percent.

The preceding table depicts statistics collected by the American Association of Colleges of Nursing which confirms that this decline "is not reflective of a diminishing freshman pool, rather it is an indication that individuals seeking a professional education are not seeking nursing" in the same numbers as in recent years. (1988) Additional AACN data are found in Attachment 1.

TABLE 2.—A COMPARISON OF 1987 NURSING RELATED STATISTICS—NORTH CAROLINA AND UNITED STATES

Variable	North Carolina	United States
Number of nurses (RN)	51,395	1,900,000
Percent employed as RN's	85	79
Percent female	98	97
Employed in hospitals (percent)	65	68
Hospital vacancy rate (percent)	8.6	27
Educational preparation (in percent):		
Diploma	34	
ADN	27	>65
BSN	28	28
MSN	3	6
Enrollment decline, 1982–86:		
Diploma (phasing out) (in percent):		
ADN	12	15
BSN	26	28.2

Sources: ANA, NCNA, NC Board of Nursing (88).

Concern is mounting, therefore, since the growing shortage may well be of protracted duration and of distressing proportions. Because nursing is an invaluable national resource it is imperative that immediate and valid steps be taken to effect long-term remediation for the manpower problem.

Specifically, attention needs to be directed toward recruitment, retention, respite, and reorganization. Recruitment efforts should be targeted toward younger school children in the middle grades and adults planning mid-life career changes. Models should be developed for cooperative efforts between health care institutions and educational institutions. Massive media campaigns promoting nursing as an attractive career should be mounted. External funding is needed for public relations activities of this magnitude.

Retention efforts to foster a supportive work climate for nurses, particularly in the hospital setting, are sorely needed. Hospitals have historically provided impoverished environments for nurses. With good reason, they have been termed "pink-collar ghettos". Yet, the literature is replete with sound studies of successful strategies to retain nurses. For example, we know that decentralized decision-making, participative management styles, clinical autonomy, advancement opportunities, educational support, and an all RN staff mix, contribute to job satisfaction for nurses. The presence of these organizational attributes along with higher salaries and solid benefit packages will retain staff nurses in the acute care settings where there are now the most vacancies. Exemplars of health care agencies providing a professional ambience for nursng practice need to be funded, studied, and replicated. (Attachments 2 & 3 elaborate on nursing attrition in hospitals)

Programs of respite for critical care nurses suffering physical and emotional burnout from sustained high stress in clinical practice should be developed. Critical care is now experiencing the greatest loss of registered nurses. Minisabbaticals, weekend retreats, participation in educational conferences, temporary reassignment to special projects, employee health promotion activities, or the establishment of support groups would all be viable strategies to alleviate the high level of stress encountered in the critical care units. Further research is required to evaluate the most efficacious was to deal with stress reduction in nursing.

Finally, the reorganization of nursing education to allow two entry levels to nursing practice is long overdue. Nursing, as a practice discipline, has evolved along the same paths as have teaching, accounting, medicine, law, and pharmacy—from apprenticeship to two year training programs to professional studies housed in the University. Only the progress in nursing has been and is constrained by stubborn external barriers from self-vested interest groups. I believe that it is absolutely necessary to merge the practical nurse programs and the associate degree nursing pro-

grams and thus establish a first level practitioner. The product, called an associate nurse, would function as a nursing technician in acute and long-term care settings. Registered nurses would be then prepared only in colleges and universities and hold the minimum of a baccalaureate degree. These advanced practitioners would be responsible for all aspects of nursing care delivery in the wide spectrum of settings. Reorganization of nursing education as has been proposed by the profession would clarify roles, delineate responsibilities, clarify lines of accountability, attract more persons to nursing as a career, and safeguard the public welfare. Enabling legislation for revised licensing criteria must be forthcoming.

To support the prescribed initiatives of recruitment, retention, respite, and reorganization, I would urge passage of certain pending bills. Particularly important is the reauthorization of the Nurse Education Act, Title VIII of the Public Health Service Act (S. 2231). This would provide for maintenance of nursing programs though institutional support to the schools and financial assistance to nursing students. Also critical to the shortage problem is the passage of the Kennedy Nursing Shortage Reduction Act (S. 1402) which would fund demonstration projects. A third bill now in the House is the Pursell sponsored Nursing Research Facilities Construction Act which would allocate monies for regional nursing research centers (H.R. 4190).

If there are not vigorous interventions made by the body politic at this time on behalf of nursing, rural health needs may well go unmet. In rural areas such as Eastern North Carolina there are more of the elderly and the young, more poor especially the working poor, more individuals at health risk, higher prevalence of chronic disease, more accidents, disheartening infant morbidity and mortality statistics and fewer health resources. (see Attachment 4) Nurses can provide effective and cost-efficient care to geriatric clients, school children, pregnant women, and home health patients. Much empirical evidence exists which shows that Nurse practitioners who work in health departments are excellent primary care providers. Nurses also manage care in occupational health sites, do health risk appraisal, offer family counseling and mental health therapy, teach health promotion behaviors, and screen for chronic diseases. All these nursing services are essential to the rural residents. They do not deserve less.

To summarize, there is a growing societal demand for well-educated practitioners of nursing to meet the complex needs of patients in today's health care system. Decisive action, therefore, must be taken to recruit the brightest and best to nursing, to foster a work environment supportive of autonomous nursing practice, and to enhance the capability of already practicing nurses to further their education. These are means of assuring the quality of care provided the American public. Nursing is essential to the well being of our rural citizens. It is indeed a precious national resource and as such it should be protected and nurtured.

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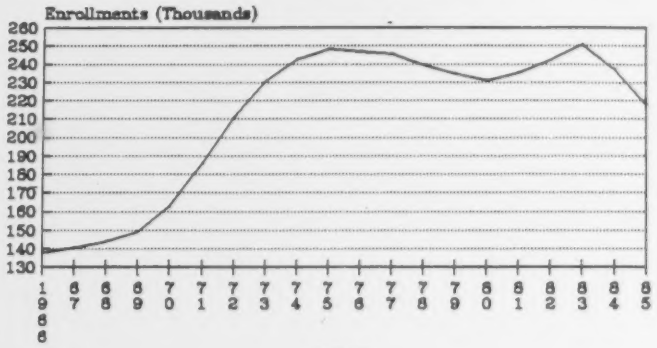
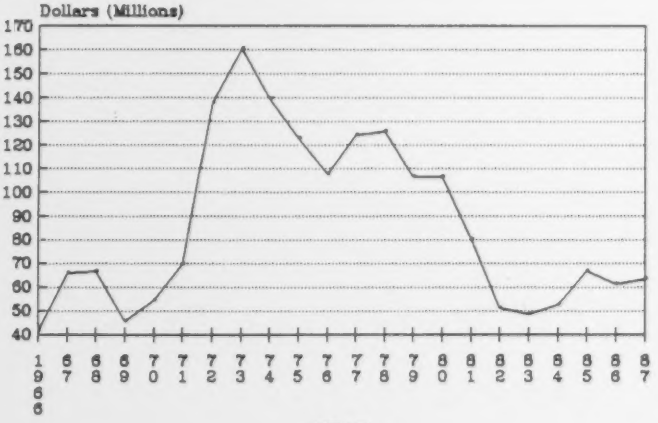
ENROLLMENT CHANGES
ALL NURSING PROGRAMS



FEDERAL SUPPORT FOR NURSING EDUCATION
YEARS 1965 - 1987



NORTH CAROLINA NURSES ASSOCIATION

Position Statement

Problems Related To The
Recruitment, Utilization, and Retention of Professional Nurses

STATEMENT OF CONCERN

Over recent months various media sources have focused on a "nurse shortage" which has been attributed to problems in attracting students to enter the profession, problems in recruitment of nurses to certain care settings (hospitals in particular), and problems of retention of nurses in the workplace. While a variety of causes for this situation have been cited, and numbers of solutions suggested, it is important to recognize that the problem is not a new one—nor was it unanticipated.

BACKGROUND

When the first National Commission on Nursing met in August, 1967, a portion of its mandate was to address the dilemma of the supply and demand of nurses. At that time the media was reporting critical shortages of nurses in hospitals resulting in the closing of ards and services. In 1970, when the Commission released its eport and recommendations, one prominent conclusion was that "improving the economic and social satisfactions of nursing might quickly relieve the shortage of nurses by returning to the man-power pool some of the hundreds of thousands of individuals who had retired from active careers." (Lysaught, 1974, p. 6)

The second National Commission on Nursing released its report in late 1981. The nursing practice section of this report stressed the need for organizational structures in health care agencies to accommodate nurses as professionals and clearly states that "changes in organizational structures are essential" in order to improve patient care and nurse job satisfaction. (National Commission on Nursing, 1981, p. 23) Specific recommendations from *this* study include an "organizational climate conducive to professional nursing practice and effective management of the nursing resource."

The Institute of Medicine and two National Commissions on Nursing, after their careful studies of nurse manpower problems have agreed that "employers bear major responsibility for improving the retention and satisfaction of nurses." (Aiken, 1983, p. 1443)

In the Magnet Hospital Study, published in 1983, the American Academy of Nursing focused its attention on issues related to the shortage of nurses in hospitals. This study sought to understand the characteristics of those hospitals which were successful in attracting and retaining nursing personnel.

The Magnet Hospital Study identified organizational variables that have "promoted the nursing staff's job satisfaction, with accompanying fulfillment of both professional and personal needs." In short, "magnet" hospitals attract nurses and keep them.

In North Carolina in 1984, a survey conducted by the North Carolina Nurses Association indicated that the factors singled out / the studies cited above were highly relevant work setting features sought by North Carolina nurses. Ninety-five percent or more of the nurses responding to a published questionnaire indicated that it was important to them that their work setting possess these characteristics.

A 1986 study conducted by the American Organization of Nurse Executives showed that more than 90% of the hospitals surveyed reported that they were trying to recruit Medical-Surgical Nurses and 80% were trying to recruit Intensive/Critical Care Nurses. Eighty-seven percent of the hospitals reported needing at least sixty days to recruit to fill these positions. Hospitals reported twice as many openings for nurses in 1986 as in 1985.

NCNA POSITIONS

It is the position of the North Carolina Nurses Association that:

...the concerns of attraction to nursing as a career choice, recruitment into the work force, and utilization and retention of nurses are directly related to issues and problems which exist in the settings where nurses are employed;

...the environment for professional practice directly affects the supply of nurses available to meet the health care needs of today's consumer; and

...employers of nurses must make the changes necessary in that environment to stabilize the work force, save recruitment and orientation costs, and avoid the devastating impact of high turnover and inadequate staffing.

The North Carolina Nurses Association believes that critical changes must take place. Employers must assure:

...sound personnel policies that support a relationship between the nurse and the employing agency which respects individuals and the professional Code of Ethics and nursing practice standards;

...participative management models in which nurses at all levels have direct input into the decisions affecting nursing practice;

...nursing representation at the highest level of management by a nurse executive who is educationally and experientially prepared for the position;

...provisions for professional development and career advancement in administration, education, and clinical practice; and

...an atmosphere which encourages and facilitates the identification and systematic investigation of nursing practice problems by nurses.

The employer of nurses must recognize that nurses should have authority over their own clinical practice. The primary frustrations reported by nurses in staff positions involve inappropriate nursing workload in relation to patient volume and acuity (and the process of decision making in determining these workloads), inappropriate nursing assignments, and the volume of non-nursing functions frequently relegated to the registered nurse.

The solution to these concerns rests in the participation of the front line nurse in any decisions directly related to patient care. Accomplishment of this solution can be expected to have a positive impact on recruitment into the profession as well as to particular settings, and retention in the workplace. This outcome will ultimately improve the quality of health care services to the community.

CONCLUSION

The factors dealt with in this statement are critical elements in the nurse shortage problem. It is important to stress the responsibility of each individual nurse to promote and utilize opportunities to develop and support the components of work settings that are conducive to professional nursing practice and therefore the best possible patient care.

Approved by the NCNA Board of Directors, May 1, 1987.

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SPECIAL REPORT

THE NURSE SHORTAGE

Myth or Reality?

THE proportion of vacant positions for registered nurses in hospitals doubled between September 1985 and December 1986,[1] reaching the levels of the last national nursing shortage of 1979. Current reports of vacancies are perplexing in the light of the size of the nation's supply of nurses. The output of nurses has doubled over the past 30 years, greatly exceeding the population growth, and licensed registered nurses now number 2.1 million. Between 1977 and 1984 alone, the number of employed nurses increased by 55 percent, as compared with an 8 percent growth in population.[2] Intuitively, it would seem that an increased number of nurses would be the solution, but the problem persists nevertheless.

The reported shortage of hospital nurses exists in the midst of a substantial reduction in hospital inpatient capacity nationally. The demand for acute inpatient care in general hospitals has fallen, resulting in 50 million fewer inpatient days in 1986 than in 1981. Since 1983, hospitals have closed more than 40,000 beds, and average hospital occupancy rates dropped to 63.4 percent in 1986.[3] Enrollments in nursing schools have also decreased markedly, raising the possibility that fewer nurses than anticipated will be available in the future.

There is now a contentious debate about whether a shortage of hospital nurses truly exists and about its causes. In 1981, the Institute of Medicine was commissioned by Congress to reconcile the evidence of an increased supply of nurses with continued reported shortages. The study concluded that the national supply of generalist nurses was adequate for the present and short-term future.[4] Cyclical vacancies in positions for hospital nurses were attributed primarily to local labor-market conditions, although a shortage of nurses in certain specialties was noted. Recommendations were made to the hospital industry on the need to restructure nursing roles and develop improved financial rewards and opportunities for career advancement in clinical care.[5] The National Commission on Nursing made remarkably similar recommendations in 1983.[6] But in 1986, the American Hospital Association was again reporting that high vacancy rates in positions for nurses were disrupting hospital care,[1] whereas the U.S. Department of Health and Human Services again concluded that the national supply of nurses was in balance with the demand.[7]

EMPLOYMENT PATTERNS OF NURSES

The shortage of nurses is measured by the hospital industry as vacant budgeted full-time-equivalent positions for registered nurses. Vacancy rates, however, are not an objective measure of the need for bedside nurses. Moreover, the number of budgeted positions for nurses reflects a number of factors, including budget constraints as well as local wage rates. Despite these limitations, we have chosen to analyze vacancy rates because they are used by the industry to reflect the changing supply of nurses.

There are several commonly held but erroneous beliefs about nurses' work patterns. One misconception is that nurses have left nursing in large numbers and are either inactive or working at jobs outside health care. In contrast, nurses have one of the highest rates of participation in the labor force among workers in predominantly female occupations. Almost 80 percent of registered nurses are actively employed[2] either full-time or part-time, as compared with 54 percent of all American women. Not much is known about those who do not renew their licenses and, therefore, are not counted in the population of registered nurses. But less than 6 percent of registered nurses are employed in other occupations and are not seeking a position in nursing.[2] Given the responsibilities of women for child rearing and other domestic concerns, an employment rate of 80 percent may be almost as high as can be expected. Thus, it is unlikely that unemployed nurses represent a large potential resource for hospital employment. However, nursing is somewhat unusual in

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that 27 percent of the total pool of registered nurses work part-time. Clearly, a change in the number of hours worked by more than 500,000 part-time registered nurses could substantially affect the supply of full-time-equivalent nurses.

Some observers have suggested that the shortage of nurses in hospitals may be due to the increased demand for nurses in ambulatory settings and new administrative positions in health care. However, hospitals' share of the ever-growing pool of nurses has not changed substantially since 1960. Sixty-eight percent of all employed nurses work in hospitals.[2] Hospitals have dramatically increased the number of nurses they employ in the aggregate and in relation to numbers of patients, even when the recent increase in outpatient visits is taken into account. In fact, hospitals are employing more registered nurses than ever before and are even replacing non-nurses with nurses — just the opposite of what would be expected during an actual shortage of nurses.

In response to reduced numbers of inpatients, hospitals employed 133,376 fewer full-time-equivalent workers in 1986 than in 1983.[3] In contrast, the number of full-time-equivalent nurses increased by 37,500 during the same period.[8,9] A substantial increase in the ratio of nurses to patients resulted. In 1972, hospitals employed 50 nurses per 100 patients (average adjusted daily census); by 1986, the figure had increased to 91 nurses per 100 — an 82 percent expansion (Fig. 1). Aides and licensed practical nurses were replaced by registered nurses. In 1968, registered nurses accounted for only 33 percent of hospitals' total nursing-service personnel; by 1986, registered nurses accounted for 58 percent.

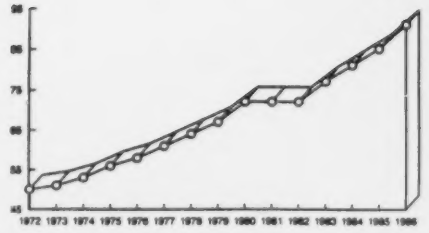

Figure 1. Number of Hospital Registered Nurses Employed per 100 Patients (Average Adjusted Daily Patient Census), 1972–1986.

Data are from *Hospital Statistics*.[9]

The Changing Demand for Nurses

The rapidity with which the current shortage developed suggests that increased vacancy rates must be due to a changing demand for nurses, not to a declining supply. There are three primary explanations for the recent increase in the demand for hospital nurses. First, hospitalized patients are sicker and require more care than in years past, on average, because of the reduction in discretionary admissions and the shorter average length of stay. However, there is no basis to suggest that the average condition of hospitalized patients changed dramatically enough between 1982 and 1986 to require a 26 percent increase in the ratio of registered nurses to patients. Although the changing case mix may provide a partial explanation for the increased demand for nurses, it cannot be the only explanation.

A second explanation for the recent increase in vacancy rates is related to changing budget constraints in hospitals. When vacancy rates were at an all-time low of 3.7 percent in 1984, the Medicare Prospective Payment System was just being implemented and fears of severe hospital-budget limits were widespread. As a result, some budgeted positions were eliminated. Unexpectedly high operating margins, however, provided the opportunity for hospitals to budget for more nursing positions.

A third explanation is related to changes in nurses' relative wages. In most labor shortages, wages are adjusted and other incentives are developed to attract additional workers. These market adjustments fail to occur in nursing with the rapidity or magnitude seen in other labor markets. Labor economists have described nursing as a "captured" labor market.[10,11] In any given community, a small number of hospitals employ most of the local nurses — a phenomenon known as oligopsony in labor economics. Employers offering nurses jobs with weekday hours usually have no trouble employing nurses and thus do not compete with other employers on the basis of salary. There is no demand for nurses outside the health care field that is sufficient to create competitive pressures on the hospital industry, as there is, for example, for computer programmers. Moreover, hospital administrators tend to assume that there is a finite number of nurses in any given community, and that wage competition among hospitals will be costly and will not resolve community shortages. The majority of nurses, if they want to work, must accept the terms offered by hospitals.

Registered nurses are versatile employees in a hospital context.[12,13] They can provide all the services for which hospitals sometimes employ nurses' aides and licensed practical nurses, and they can also often perform a wide range of other functions, including those assigned at other times to secretarial and clerical personnel, laboratory technicians, pharmacists, physical therapists, and social workers. Nurses substitute for physicians under some circumstances, and commonly assume hospital management roles after regular work hours. Thus, when nurses' relative wages are low as compared with other workers', it is advantageous for hospitals to employ them in greater numbers and in lieu of other kinds of workers. Even if nurses' wages are 20 to 30 percent higher than those of licensed practical nurses or secretaries, it may still

be more economical to hire nurses, because they require little supervision and can assume responsibility for a wide range of duties. The increased demand for nurses created by low relative wages can lead to shortages in some geographic locations, in specialty units, and on undesirable evening, night, and weekend hours.

The relative-wage theory is supported by data spanning several decades[14,15] (Fig. 2). From 1946 to 1966, for example, the increases in nurses' wages lagged behind those in comparable women's occupations. Nurses' wages over the period increased by 53 percent, whereas teachers' salaries increased by 100 percent and female professional and technical workers' salaries increased by 73 percent. In the early 1960s, more than one in five budgeted positions for nurses were vacant. There was great concern at the time that the increased demand for hospital care accompanying the introduction of Medicare and Medicaid would exacerbate the shortage of nurses. But these new programs were accompanied by substantial wage increases for nurses. Employment rates among nurses increased substantially after these wage increases, as did enrollments in nursing schools. The proportion of vacant budgeted positions for nurses in hospitals dropped from 23 percent in 1961 to 9 percent by 1971. But, after hospital wage and price controls in 1971 and state rate setting and the voluntary hospital cost-containment effort a few years later, nurses' wages declined relative to other groups' and the proportion of vacant positions for nurses in hospitals increased again, leading to the shortage of 1979. There was a wage response to the 1979 shortage; nurses' wages rose an average of 13 percent annually in both 1980 and 1981. By 1984, the proportion of vacancies had reached a low of 3.7 percent.

The substantial wage increases received by nurses in 1980 and 1981 did not continue subsequently, and by the time the new Medicare prospective payment system was implemented, nurses' wages had been eroded. Hospital nurses have received only modest wage increases since 1982. By 1985, average salaries for teachers were 19 percent higher than those for nurses, and average salaries for all female professional and technical workers were 10 percent higher. Despite all the publicity about the shortage of hospital nurses, nurses' wages increased only 4 percent in 1986.[18]

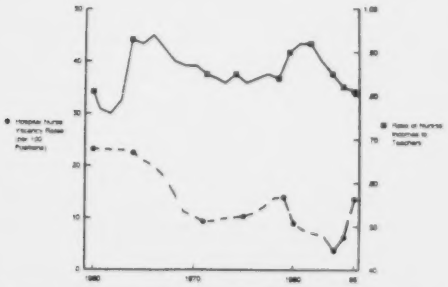

Figure 2. Hospital-Nurse Vacancy Rates per 100 Budgeted Positions and Ratio of Nurses' Incomes to Those of Teachers.
Data are from references 10 and 16 through 21.

Declining Nursing School Enrollments

Since 1983, enrollments in nursing schools have dropped by 20 percent[22] (and National League for Nursing: unpublished data). The number of new nurses graduating annually is predicted to fall from a high of 82,700 in 1985 to 68,700 or lower by 1995.[7] All types of nursing programs have had declining enrollments; associate-degree programs have had a decline of 19 percent, and baccalaureate programs 12 percent (National League for Nursing: unpublished data). Enrollments in three-year hospital diploma programs have been declining for more than two decades and now account for only 14 percent of graduates annually (Fig. 3).

The country's demographic profile is partly responsible for declining enrollments because of the smaller size of 18-year-old cohorts in recent years. However, interest in nursing as a career has fallen precipitously among college freshmen in both community colleges and four-year institutions. The University of California, Los Angeles, national survey of first-time college freshmen indicated a 50 percent decline since 1974 in the proportion of full-time women students planning to pursue nursing careers, in contrast to an almost threefold increase in the proportion interested in careers in business[23] (Fig. 4). Moreover, the College Board recently released data indicating that the SAT scores of high-school students interested in nursing careers were well below the national average for college-bound students, and that the SAT gap between prospective nurses and non-nurses was widening over time.[24]

There are many reasons for the declining interest in nursing. Whereas starting salaries of nurses are now comparable to those of other college graduates, the average maximum salary for nurses is only $7,000 higher than the average starting salary.[16] Since more women are choosing to work continuously in the labor force, the low raises discourage them from choosing a career in nursing. Moreover, employers do not offer substantial differences in salary in return for advanced education in nursing. Thus, the economic return on a baccalaureate degree in nursing is poor as compared with the return in alternative fields. Women today have many more career options than they had in years past. Most other careers offer comparable or higher economic rewards and do not require night and weekend work — a notable disadvantage of nursing.

Recommendations for Change

A number of issues deserve careful reconsideration and experimentation. First, public-policy makers

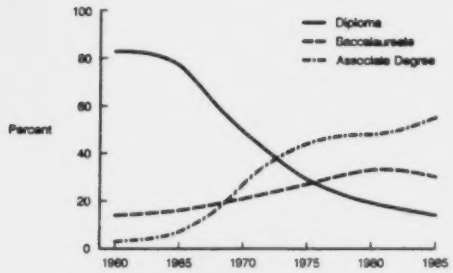

Figure 3. Percentages of Graduates of Nursing Schools in Various Types of Programs, 1960–1985.
Data are from *Nursing Data Review*.[22]

must recognize that hospital rate setting can induce labor shortages by artificially depressing wages in occupations like nursing, in which hospitals are the dominant employers. In the short term, depressed wages will increase the demand for nurses, because they can substitute for other personnel, and result in acute spot shortages and high vacancy rates. Over the long term, recruitment to nursing will be seriously eroded by the absence of an adequate salary range that rewards skill and experience.

Second, one of the most unattractive aspects of nursing is the requirement of night and weekend work. With sicker patients, hospitals now need many more nurses on these unpopular shifts than they needed in the past, when it was not unusual to have a single nurse covering a unit at night. Most women want to work regular daytime hours and will even choose less interesting, less skilled, and worse-paying jobs to accomplish this. Preference for day work explains why vacancy rates are low in ambulatory care despite lower average salaries. Other industries that operate on a 24-hour basis offer substantial differences in wages for evening, night, and weekend work in order to attract sufficient voluntary staff coverage. Hospitals offer only small differences and try to make shift rotation a requirement of employment. Curiously, most of the innovations hospitals have adopted to reduce vacancies during unpopular shifts actually encourage nurses to work fewer hours. For example, some hospitals pay nurses a full-time salary to work two 12-hour weekend shifts (24 hours per week) but will not pay full-time nurses equivalent hourly rates for unpopular shifts. In view of all the expenses associated with continued high vacancy rates, increasing marginal wage rates to fill vacancies on unpopular assignments might not be as costly as is commonly assumed.

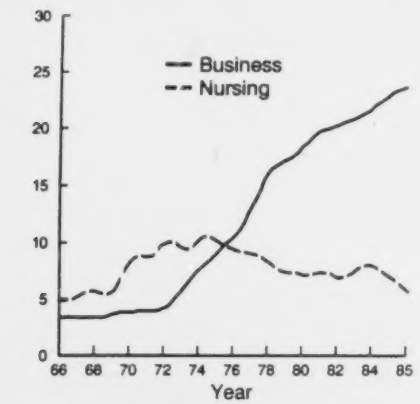

Figure 4. Career Preferences among Full-Time College Freshman Women, 1966–1985.
Data are from Astin et al.[23]

Third, the work requirements of nurses and other personnel in hospitals should be restructured. The ratio of support personnel to professionals is substantially lower in the hospital industry than in other industries. Given the complexities of operating busy hospital inpatient units, there is an astounding absence of secretaries, administrative assistants, and mid-level non-nurse managers. Moreover, the computerization of hospitals has lagged far behind that of other industries. Nurses are currently performing many nonclinical, administrative, and management functions in hospitals. Fewer better-paid and better-educated nurses in combination with an improved nonclinical support staff might yield better care without substantial increases in operating costs.

Fourth, hospital management should introduce incentives to encourage experienced nurses to remain in clinical care. A differentiated wage structure that recognizes experience and advanced education is critical. Employment benefits such as pensions, tuition support, and sabbaticals could be used much more effectively to develop "loyalty" and thus reduce costly staff turnover.

Fifth, physicians should take leadership roles in the development of more effective collaborative models of practice with nurses in hospitals. Much of the dissatisfaction of nurses with hospital practice is related to the absence of satisfying professional relationships with physicians. Many nurses choose administration over clinical practice in an effort to obtain greater status in their interactions with physicians. More effective nurse–physician collaboration in clinical care activities would improve the professional satisfaction of both groups and contribute to improved patient outcomes as well.[25]

Conclusions

The evidence suggests that under current market conditions in many local communities, the demand for nurses is greater than the supply. Regardless of the reasons for this imbalance, there is only a limited number of possible solutions. Expansion of nursing-

school enrollments to increase the national supply of nurses might eventually solve the vacancy problem but is unlikely to occur, given demographic trends and the declining interest of young people in nursing careers. Recruiting inactive nurses into the work force is also not a promising solution because employment rates are already high among nurses and may have reached a ceiling. Expanding the number of nurses trained abroad is an expedient option but one that might create more problems, in terms of quality of care, than it would solve. The development of incentives to induce part-time nurses to work more hours is a promising option that should be pursued. Finally, if all the above methods to increase the supply of nurses still do not eliminate disruptive vacancies, restructuring hospitals to make more appropriate use of the special expertise of nurses is a difficult but obvious alternative.

None of these recommendations are new; they have been advocated consistently by every panel studying nursing shortages. Implementation, in contrast, has been slow, despite encouraging evidence from the few hospitals that are making the suggested changes.[26] The fact is that nursing shortages are a consequence of complacent management and the reluctance of administrators to reexamine traditional practices. In the light of the attitudes of young women and their changing aspirations, what is now an artificially created shortage may become a critical problem in the future. Nurses are an essential resource for hospitals and the nation's health. Addressing their needs and aspirations realistically and examining their work conditions meaningfully are prerequisites for high-quality patient care now and in the future.

LINDA H. AIKEN, R.N., PH.D.
CONNIE FLYNT MULLINIX, R.N., M.P.H., M.B.A.

Robert Wood Johnson Foundation
Princeton, NJ 08540

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DEMOGRAPHIC PROFILE OF CONSUMER SAMPLE

	SAMPLE*	NATIONAL
SEX		
- MALE	21.2	31.5
- FEMALE	78.7	68.5
AGE		
- 55 TO 64	19.8	12.8
- 65/OVER	22.1	19.9
EDUCATION		
- LESS THAN HS	26.4	11.7
- HS GRADUATE	31.9	34.5
- SOME COLLEGE	26.1	26.1
- COLLEGE GRADUATE	15.6	27.8
INCOME		
- UNDER $15,000	31.0	20.2
- $40,000/OVER	8.2	19.1

* Note - Sample refers to population within catchment area of a rural Eastern NC Hospital

Used with permission

Hamilton/KSA

Senator SANFORD. Thank you, Ms. Jenkins, so much for being here. In fact, if you'd come up here and slip in this chair, we will hear your testimony.

Ms. JENKINS. Thank you, Senator.

Senator SANFORD. And as you might or might not have understood, Ms. Jenkins is an emergency room nurse and that's about the toughest place to be, I think.

STATEMENT OF MS. ELOISE P. JENKINS, HEAD NURSE, HALIFAX MEMORIAL HOSPITAL, ROANOKE RAPIDS

Ms. JENKINS. Yes, sir. It is a tough spot to be in, but I'm glad to be here today to say what I want to, as a head nurse and a staff nurse, because as you know, one of our situations is that as a head nurse, you do both jobs a great portion of the time.

We heard so much about the media and what they've had to say about the shortage. And we know that it has grown into a dilemma at this point in time. What is happening is that we have so few nurses, that we are fighting to exist in the system by minimizing the impact of fewer nurses, and maximizing our value, which we feel is most important.

We are the largest number in our profession in the health care industry. But we're losing our manpower. We don't have the numbers to get the job done the way that we want to do it.

In the community hospital, we focus on generalization rather than specialization. We don't have experts with whom to consult 24 hours a day. We have to depend on our own feelings and what we know we need to do to get our job done. We know that the public is expecting more from us as time goes on.

We also know the hospital administrators are working with nursing administrators, trying to alleviate the shortage.

But even though we've had bonuses, flexible schedules, benefit package deals, all strategies to get nurses back into nursing at the bedside, they have failed.

We have a revolving door syndrome. You can recruit nurses and before the 3 months' probationary period is over, they're gone. They go to neighboring urban hospitals which will give them a dollar more per hour. Then you have a yo-yo syndrome. It's an up and down situation. Thus these strategies have not worked.

Nurses are frustrated. They begin to look to the head nurses and managers for solutions to the problems. But where are the head nurses? They are delivering patient care. After 8 to 12 hours of delivering patient care, they are not physically or emotionally able to support the nurses who are depending on them to be their leaders.

So using head nurses and managers in staffing for long-term purposes is not the answer. We need nursing leaders, for this is a great problem in the rural setting. We just don't have the leaders who are educated and equipped to handle the problems of the staff nurses.

So we've identified the problem, and we have tried to alleviate them but this has not worked. In the rural area, most of our nurses are educated, as Dr. Lawler mentioned, in community colleges. They are associate degree nurses, and we desperately need bedside nurses. These are nurses who are educated to become highly skilled

technicians. They are not intended to be the leaders of nursing as we are speaking of today.

We need to support education. We must have education for both the staff nurse level, the head nurse level, the management level, and nursing leaders at all levels. If we are going to get anywhere, then we must make a new beginning in our profession.

We want to provide good patient care. As the numbers decrease, our professional commitment also decreases, because we must have nurses to get our job done.

So I would like to ask that we have support through the Nurse Education Act, research, and other things that we need.

Senator SANFORD. Well, we thank you so very much for your thoughtfulness in preparing this, and for coming here today. Thank you so much.

Ms. JENKINS. Thank you.

[The prepared statement of Ms. Jenkins follows:]

THE NURSING SHORTAGE IN THE RURAL HEALTH SETTING

As the nursing shortage has gained national media attention, the rural health care setting; specifically the local community hospital is now faced with the dilemma of just not enough nurses to get the job done. The professional nurses, growing fewer in numbers, are fighting to exist in a system by minimizing the impact of less nurses and maximizing the value of personal commitment to our caring profession.

The profession of nursing maintains the reputation of being the largest by numbers in the health care industry. Ironically, the discipline seems to endlessly report nurse power shortages. At this time the discipline of nursing is deeply involved in a crisis of a shortage of numbers of nurses. As the numbers grow smaller, the caring professional nurse in the rural hospital is working more overtime hours then ever before, yet are caring for patients that are of a more critical nature than their predecessors two decades past. As the awareness level of the rural community increases so do the demands and expectations of the staff nurse providing bedside care.

In the community hospital the staff nurses' focus is on generalization rather than specialization. The staff nurse feels a need to be all things to all people. As a generalist the nurse may be the total care provider at the bedside, nursing educator, patient advocate, counselor, researcher, technologist; assuming responsibility and accountability for each role. As the crisis continues, the caring and commitment begins to grow thinner and thinner. We care and have questions as to who is going to care for our patients and provide the individualized care to our sick and elderly.

Hospital administrators are working jointly with nursing administrators in developing strategies to attract nurses to the community hospital setting. Strategies such as salary increases, bonuses, flexible schedules, benefit package deals, and recruiting nurses who have exited the profession back to the bedside, have proven unsuccessful. Efforts that were made to alleviate the crisis have either caused or contributed to the concept of "the revolving door syndrome". Hospitals are competing by using the same techniques creating the "yo yo" effect. Some leave before they even complete a ninety day probationary period. As the frustration level grows, staff nurses are "playing games" with nursing management and nursing administration, and the recruitment and retention process continues. The question remains; what do staff nurses want? The majority of staff nurses want to work where the staffing is adequate, they want a certain level of pride in the quality of care their patients receive.

As the nursing staff struggle with their internal emotions they begin to look to nursing managers and leaders for solutions to the crisis situation. At this point, because we are in a crisis situation the head nurse may also be an active member of the patient care delivery system; functioning as a staff nurse in addition to planning, organizing, staffing, directing, and controlling the unit to which he or she is accountable for twenty four hours per day. The head nurse manager eventually is physically and mentally unable to respond to the needs of the staff and solves his or her problem by exiting the position for another setting other than the rural hospital setting. It is no wonder that after an eight hour shift of caring for a full patient care assignment that the head nurse will become drained to watch the staff complete a day when the head nurse may just be beginning the duties for which he or

she was originally expected to perform. One unit in a local hospital has had a turnover of six head nurses in five years. The position was so overwhelming because of the staffing crisis that the position was impossible to fulfill. Staffing by using the head nurse will not prove to be beneficial as a permanent solution to the staffing shortage.

The problem has been identified, alternative solutions have been implemented and have failed to suffice in alleviating the crisis of the nursing shortage in the rural hospital setting. The "quick-fix-its," "patchwork" process has not solved the situation. There must be other solutions, a new beginning, one that will seep beneath the surface to the roots of the problems.

In the rural hospital setting the bulk of nurses are provided through the local community college setting with a focus on preparing nurses to function at the bedside providing individual patients with quality of care that will be acceptable to the community at large. This level of preparation prepares the nurse to be able to become highly skilled practitioners in the hospital setting. Enrollment in nursing programs at the community college level has decreased leaving the community hospital without benefit of the numbers of registered nurses that are needed to provide the quality and quantity of care required at the bedside.

The rural hospital also suffers in another area; that of an adequate number of qualified leaders of nursing. There is a geographical disadvantage to the university setting where extended preparation is provided to educate nurses in management and leadership skills. It is for the same reason that knowledge gained through research is unavailable to the nurses in the rural hospital setting. The problem extends also to the area of continuing education for staff nurses and management. The geographical distance between the rural setting and the educational setting is an area of concern to the rural health care providers. It is more difficult to maintain an expertise for the individual nurse who is functioning in the local setting, yet is critical to the rural setting.

How do we achieve the new beginning at the grassroots level? The answer is clear; we must attack the problem by providing an educational system that will benefit the staff nurse at the bedside and the nursing leaders at the various levels. Nursing will need to seek the support of our legislators to assist us with our new beginning. Legislators may be the key persons who will help decide the future of nursing and patient care in the rural hospital setting. Nursing needs federal support for advanced nursing education; support for student loans at all levels under the Nurse Education Act.

Nursing students are faced with the high cost of education yet salaries are not comparable to other health related fields. The American Nurses Association strongly supports the Nurse Education Act (Title VIII) as a means of a new beginning for nursing. In addition to the Nurse Education Act (Senate Bill 2231) the American Nurses Association also supports the Kennedy Nursing Shortage Reduction Act (Senate Bill 1402) and the Pursell Bill for nursing research (House Bill 4190). With legislative support we will have our new beginning.

The new beginning at the rural hospital setting will be an educational approach, one that will have a lasting value. The educational approach will create a system that will minimize the crisis of shortage * * * nurses will be able to practice where staffing is adequate. Nurses will be able to maximize their value * * * they will be proud of the quality of care their patients receive. It is at this level of logic and reasoning that professional nurses will be able to regain personal commitment to the caring profession.

Senator SANFORD. Mr. Harrell of Duplin General Hospital.

STATEMENT OF RICHARD HARRELL, ADMINISTRATOR, DUPLIN GENERAL HOSPITAL

Mr. HARRELL. Senator Sanford, other members of the Budget Committee, I am the administrator of Duplin General Hospital in Kenansville. Ours is the only hospital in the county of forty-two thousand people. The nearest hospital is 25 miles away.

Many of our patients are farmers and members of farm families. They have lived on their land for decades, some for generations. They have no desire to live anywhere else. More than five thou-

sand Duplin County residents are aged 65 or older, so having a hospital nearby means a great deal to them.

If residents of any age should have a serious accident on the farm, having our hospital close by could mean the difference between life and death. I don't mind telling you that I worry, at times, about the future of our hospital. Medicare reimbursement is the major reason why I worry.

Of all the days of inpatient care we provide, 60 percent are provided to medicare patients. One patient out of every three admitted at Duplin General is covered by medicare. Almost half of all of our revenue comes from medicare.

When the medicare prospective payment system went into effect 5 years ago, we were collecting 80 cents out of every dollar charged. Now, we're collecting only 60 cents of every dollar.

Looking at that another way, our uncollectible amount has doubled since 1983. In medicare patients alone, the situation is even worse, in part because of contractual adjustments, we collect only 51 cents of every dollar charged with medicare patients.

Sometimes, we collect much less. A year and a half ago, a patient was admitted to Duplin General with pneumonia. The patient stayed in our hospital for 45 days, building up a total bill of almost $50 thousand. We collected a little more than $5 thousand of that $50 thousand.

What do we do about the $45 thousand that went uncollected? As you know, we tried to shift that amount onto the bills of patients with good insurance. But that number of patients is shrinking almost every day.

Businesses are beginning to dig in their heels when we ask them to pay this added amount. They want to pay only for their own employees and no one else. I can understand that, but it makes our job all the harder.

We certainly cannot shift any of these uncollected expenses to the bills of medicaid patients. We already lose 51 cents on every dollar charged for medicaid patients. These patients make up 12 percent of all of our patients admitted. And the number has been growing, up 50 percent since 1983.

Some people may say that we should get a subsidy from the county. We do receive $150 thousand a year from Duplin County to help with our operating expenses, but that is only about 2 percent of our operating budget.

If Congress cuts medicare further, we will have a very difficult time making up the lost revenue. Where are we supposed to turn? Our problem is certainly not ours alone. Forty percent of all our hospitals in North Carolina have less than 100 beds.

Hospitals of this size have a higher percentage of medicare patients than larger hospitals. In 1986, almost four out of every ten patients admitted to small hospitals in North Carolina were medicare patients.

For hospitals of 300 or more beds, that figure was fewer than three out of ten. Small hospitals in North Carolina also provide a higher percentage of days of care to medicare patients than do large hospitals.

Unfortunately, our situation is not uncommon nationally, either. I understand that 40 percent of all hospitals in the Nation lose money on medicare as it is now structured.

In Colorado, rural hospitals like ours lost $523 per medicare admission last year. Hospitals statewide in Colorado lost a total of $1.4 million last year caring for medicare patients.

In Wisconsin, a study by the accounting firm of Ernst & Whinney projects that hospitals there will lose 5 percent this year on medicare patients.

So I urge you to treat small and rural hospitals fairly when you consider changes in medicare reimbursement. For instance, there is no good reason why a rural hospital should receive less reimbursement for a given patient than an urban hospital receives.

If we hope to attract and retain good staff members, we must offer competitive wages and benefits. A competitive wage in North Carolina is virtually the same in rural hospitals as in urban ones.

I hope you will remember that hospitals' costs to provide care are going up two and a half times faster than medicare rates. This is not because we have a lot of fat left. Whatever fat was there is long gone.

Our costs are continuing to rise because of situations such as the nursing shortage. We must raise nursing salaries higher than in past years to keep an adequate supply of nurses at the bedside.

We must try to keep up with advances in technology if we are to keep an adequate number of physicians working at Duplin General. They have no obligation to practice in Duplin County. They go where they will get the services they need for their patients.

Senator Sanford, other committee members, when you deliberate, please think about the real medicare patients in counties such as Duplin. It is these patients, these citizens, who ultimately will have to bear the burden if the flaws in medicare reimbursement are not corrected.

Thank you.

Senator SANFORD. Thank you very much.

[The prepared statement of Mr. Harrell follows:]

Remarks by Richard E. Harrell
Administrator
Duplin General Hospital
Kenansville, NC

Field Hearing of the U.S. Senate Budget Committee
Greenville, NC
May 2, 1988

Senator Sanford, other members of the Budget Committee:

I am the administrator of Duplin General Hospital in Kenansville. Ours is the only hospital in the county of 42,000 people. The nearest hospital is 25 miles away.

Many of our patients are farmers and members of farm families. They have lived on their land for decades; some, for generations. They have no desire to live anywhere else. More than 5,000 Duplin County residents are age 65 or older, so having a hospital nearby means a great deal to them. If residents of any age should have a serious accident on the farm, having our hospital close by could mean the difference between life and death.

I don't mind telling you that I worry at times about the future of our hospital. Medicare reimbursement is the major reason why I worry. Of all the days of inpatient care we provide, 60% are provided to Medicare patients. One patient out of every three admitted at Duplin General is covered by Medicare. Almost half of all our revenue comes from Medicare.

When the Medicare prospective payment system went into effect five years ago, we were collecting 80 cents out of every dollar charged. Now, we're collecting only 60 cents of every dollar. Looking at that another way, our uncollectible amount has doubled since 1983.

Richard E. Harrell
Duplin General Hospital
Field Hearing of U.S. Senate Budget Committee
May 2, 1988

With Medicare patients alone, the situation is even worse. In part because of contractual adjustments, we collect only 51 cents of every dollar charged with Medicare patients.

Sometimes, we collect much less. A year and a half ago, a patient was admitted to Duplin General with pneumonia. This patient stayed in our hospital for 45 days, building up a total bill of almost $50,000. We collected a little more than $5,000 of that $50,000.

What did we do about the $45,000 that went uncollected? As you know, we tried to shift that amount onto the bills of patients with good insurance. But that number of patients is shrinking almost every day. Businesses are beginning to dig in their heels when we ask them to pay this added amount. They want to pay only for their own employees, and no one else. I can understand that. But it makes our job all the harder.

We certainly can't shift any of these uncollected expenses to the bills of Medicaid patients. We already lose 51 cents on every dollar charged for Medicaid patients. These patients make up 12% of all our patients admitted and the number has been growing— up 50% since 1983.

Some people may say that we should get a subsidy from the county. We do receive $150,000 a year from Duplin County to help with our operating expenses. But that is only about 2% of our operating budget.

If Congress cuts Medicare further, we would have a very difficult time making up the lost revenue. Where are we supposed to turn?

Our problem is certainly not ours alone. Forty percent of all hospitals in North Carolina have less than 100 beds. Hospitals of this size have a higher percentage of Medicare patients than larger hospitals. In 1986, almost four out of every 10 patients admitted to small hospitals in North Carolina were

Richard E. Harrell
Duplin General Hospital
Field Hearing of U.S. Senate Budget Committee
May 2, 1988

Medicare patients. For hospitals of 300 or more beds, that figure was fewer than three out of 10.[1]

Small hospitals in North Carolina also provide a higher percentage of days of care to Medicare patients than do large hospitals.[2]

Unfortunately, our situation is not uncommon nationally either. I understand that 40% of all hospitals in the nation lose money on Medicare, as it is now structured.[3] In Colorado, rural hospitals like ours lost $523 per Medicare admission last year. Hospitals statewide in Colorado lost a total of $1.4 million last year by caring for Medicare patients.[4] In Wisconsin, a study by the accounting firm of Ernst & Whinney projects that hospitals there will lose 5% on Medicare patients this year.[5]

So I urge you to treat small and rural hospitals fairly when you consider changes in Medicare reimbursement.

For instance, there is no good reason why a rural hospital should receive less reimbursement for a given patient than an urban hospital receives. If we hope to attract and retain good staff members, we must offer competitive wages and benefits. A competitive wage in North Carolina is virtually the same in rural hospitals as in urban ones.

I hope you will remember that hospitals' costs to provide care are going up two and a half times faster than Medicare rates. This is not because we have a lot of fat left. Whatever fat was there is long gone.

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[1] In 1986, 38.6% of all patients admitted to N.C. community hospitals having 6 to 99 beds were Medicare patients. For hospitals of 100 to 299 beds, the figure was 33.6%. For hospitals of 300 beds or more, 30.3% of all admissions were Medicare patients. Source: North Carolina Hospital Association.

[2] N.C. community hospitals of 6 to 99 beds provided 40.8% of all inpatient days in 1986 to Medicare patients. For community hospitals of 300 beds or more, the figure was 38.9%. Source: North Carolina Hospital Association.

[3] American Hospital Association

[4] Colorado Hospital Association

[5] Wisconsin Hospital Association

Richard E. Harrell
Duplin General Hospital
Field Hearing of U.S. Senate Budget Committee
May 2, 1988

Our costs are continuing to rise because of situations such as the nursing shortage. We must raise nursing salaries higher than in past years to keep an adequate supply of nurses at the bedside. We must try to keep up with advances in technology if we are to keep an adequate number of physicians working at Duplin General. They have no obligation to practice in Duplin County. They will go where they can get the services they need for their patients.

Senator Sanford, other committee members, when you deliberate, please think about the real Medicare patients in counties such as Duplin. It is these patients, these citizens, who ultimately will have to bear the burden if the flaws in Medicare reimbursement are not corrected.

north carolina
hospital association

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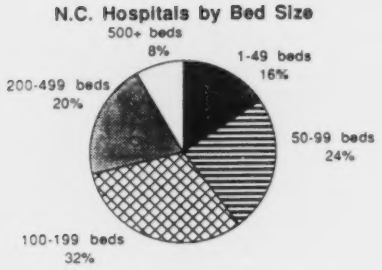
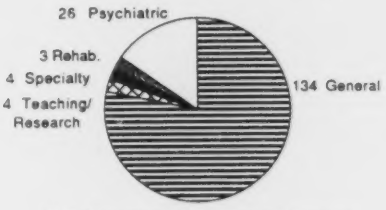
The State of North Carolina Hospitals at a Glance

N.C. Hospitals by Bed Size



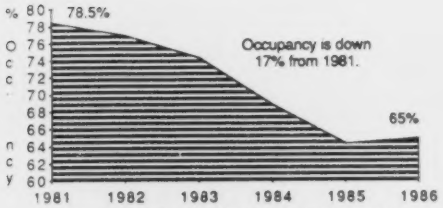
40% of N.C.'s 171 hospitals have fewer than 100 beds

N.C. Hospitals by Service Type



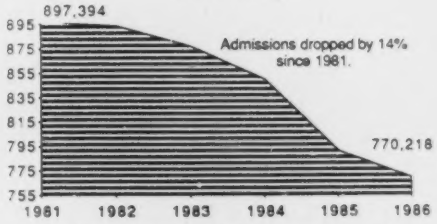
78% of the state's 171 hospitals are short-term, acute care "community" hospitals

Decline in N.C. Community Hospital Occupancy



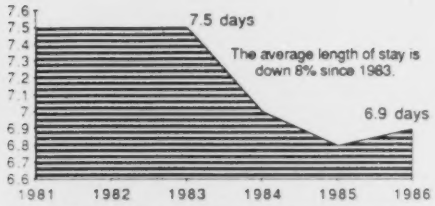
Almost one-third of the 22,431 beds in N.C.'s 134 community hospitals were vacant in 1986. This includes only beds for which hospitals had staff ready to serve patients.

Decline in N.C. Community Hospital Admissions



The downward trend in admissions among N.C.'s 134 community hospitals began before the present Medicare reimbursement system went into effect in 1983.

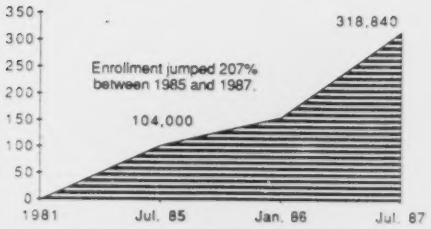
Average Length of Stay — N.C. Community Hospitals



1) In 1983 physicians began responding to the new Medicare reimbursement system by cutting back patients' length of stay. This trend affected the length of stay for all patients, not just Medicare recipients, in N.C.'s 134 community hospitals.

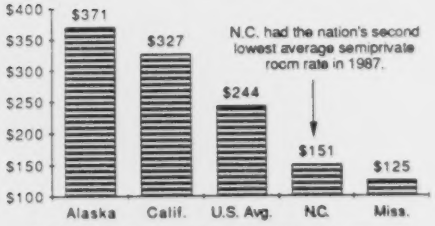
2) The recent upturn in length of stay shows that patients hospitalized today are sicker and need more intensive and expensive care than the average patient in the past. Health insurers have spurred this trend by requiring patients to pay higher deductibles and co-payments, reducing hospital use by less ill patients.

HMO Enrollment in N.C.



Increasing HMO enrollment brings closer the day when N.C. hospitals will be forced to give large discounts to all HMO patients. Such discounted rates do not include any subsidy for indigent care. This will reduce further the pool of patients to whom indigent care costs can be shifted.

Average Semiprivate Room Rates

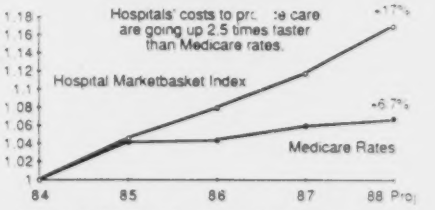


N.C. hospitals have done a good job of keeping rates low. Any Medicare cuts at the federal level will hurt N.C. hospitals disproportionately because our rates are so low to begin with.

Hospital costs continue to increase because of:
1) increases in patient severity of illness,
2) inflation in the costs of goods and services — especially labor,
3) acquisition cost of increasingly sophisticated medical technologies,
4) compliance with AIDS worker protection standards, and
5) the need to pay higher wages to attract and retain allied health professionals (nurses, physical therapists, etc.).

Source: American Hospital Association

Hospital Marketbasket vs. Medicare Rates



1) Nearly half of North Carolina hospitals' revenues come from Medicare.

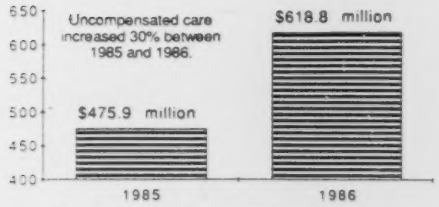
2) Although rural hospitals were granted a larger update than urban hospitals for Medicare reimbursement in FY 1988, rural hospitals are experiencing particularly disruptive changes in both utilization and financial performance. This situation needs special attention from Congress.

3) In the past five years, Medicare spending has been cut by more than $32 billion, and hospital payments have been the primary target.

4) Medicare accounts for about 9% of federal outlays but constituted 36% of the cuts in the FY 1988 budget.

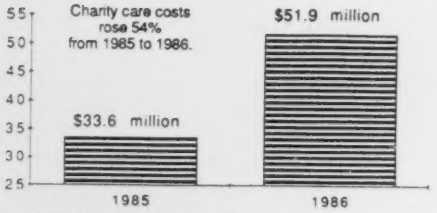
Recommendation: Annual increases for Medicare rates should at least equal the rate of increase in the hospital marketbasket of good and services during the previous year. Medicare should develop a single base price for urban and rural hospitals, adjusted for severity of illness, medical education costs and local price adjustments for both labor and non-labor resources.

Total Uncompensated Care
N.C. Community Hospitals 1985-86



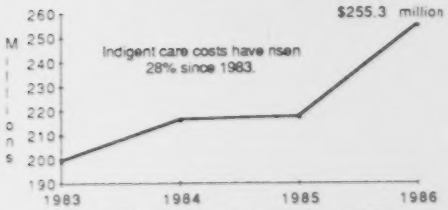
The bottom line is that net patient revenue no longer covers the cost of providing patient care.
Source: American Hospital Association

Charity Care
N.C. Community Hospitals 1985-86



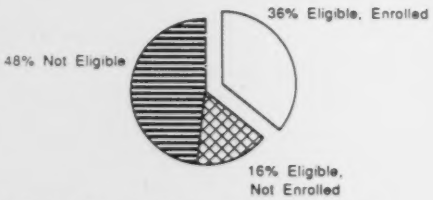
When Medicare calculates hospital profits, the government refuses to take into account the cost to hospitals of providing charity care. Source: American Hospital Association

Indigent Care Provided by
N.C. Community Hospitals



Indigent care equals charity care plus bad debts.
Source: American Hospital Association

N.C. Poor Eligible for Medicaid



1) Despite legislation passed last year, only 36% of North Carolina's poor are eligible for and enrolled in Medicaid. One reason is the exclusion of entire categories of poor people, such as single workers with no dependents.

2) Medicaid has evolved virtually into a supplemental Medicare insurance program, with 40% of Medicaid outlays nationally spent on low-income elderly, particularly for long-term care.

3) Recommendation: Medicaid should be expanded and restructured. Categories of eligibility should be dropped in favor of three distinct programs: one covering acute care for the medically indigent who are not eligible for Medicare, one providing supplementary acute care coverage for Medicare patients, and one covering long-term care for Medicare and Medicaid patients.

Senator SANFORD. Dr. McCaleb, we'll now hear you.

STATEMENT OF DR. JANE McCALEB, MEDICAL DIRECTOR, ROANOKE-AMARANTH COMMUNITY HEALTH CENTER

Dr. MCCALEB. I appreciate the opportunity to share my concerns with you about problems facing physicians and their patients in rural areas.

I'd like to give you a little bit of background. Ours is a community-based practice serving Northampton and Halifax County in northeastern North Carolina. Our bi-county service area has a population of seventy-eight thousand, with over 50 percent black, and 25 percent of our population is below poverty level. The median family income is below $13 thousand per year, and well over 6 percent of the population is medically uninsured.

Our practice has grown from two internists in one site in 1976, to fourteen practitioners, currently including three internists, four family physicians, two pediatricians, one obstetrician and four physicians' assistants in six sites.

One of our sites is a Section 330 Community Health Center funded by the Public Health Service. Eight of the ten doctors were recruited through the National Health Service Corps, and two of these have fulfilled their obligation, and had been at the practice sites longer than 5 years.

In an attempt to provide more stability and prevent physician isolation and to try and keep physicians on site, we have formed a consortium for sharing of call and administrative services.

Last year our providers had over forty thousand encounters. Our service to medicaid and medicare patients ranged from 23 to 40 percent, depending on which site. About 60 percent of our patients are black, and one of our sites serves a large Indian population.

We also provide about 30 percent of the obstetrical care at our local hospital. Our efforts to solve some of our local problems have focused on three major areas of interest to our rural community.

The first of these is reduction of infant mortality. Since the beginning of our delivery of obstetrical services in 1979, the neonatal mortality in Northampton County has dropped from the highest county in the State, at a rate of almost twenty-four per thousand, to well below the State average of less than four per thousand.

We are currently developing a case management approach for delivery of health care services to our medicaid pregnant women and their infants.

Secondly, we have worked with our local school system and mental health facility to design a school-based program for drug and substance abuse prevention, which is run by a physicians assistant and a mental health worker.

In response to the realization that by 1990, 18 percent of the population in Northampton County will be over 65 years old, we developed a Senior Spectrum Project. This will be comprised of a senior center, apartments for the elderly, rest home, and both intermediate and skilled nursing facilities.

Currently, over one hundred people in Northampton County are in nursing homes outside of the county. This causes dislocation of the patient from their family, and a loss of economic activity.

However, there are formidable problems facing us in the near future. Recruitment of physicians to rural areas is becoming increasingly difficult. Outside of our group of internists, pediatricians, obstetricians, and family practitioners, there has been a loss of ten primary care physicians, with a gain of only one primary care physician in the past decade.

It is disturbing to realize that currently, family practice and internal medicine residencies are not filling all of their available slots for residents, and that there would be an even greater shortage of primary care practitioners in the next few years.

We are also uncertain of further support from the National Health Service Corps in our efforts to recruit.

Second, perinatal care is also on the verge of decline. There's a decreasing number of family physicians in our area doing deliveries. There's increasing costs of malpractice. And there's been an inadequate number of neonatal beds and funding in tertiary hospitals.

We find ourselves in a position of being unable to provide care for all the women who would select us, and of also not being able to provide adequate alternatives to offer them.

Third, we are increasingly concerned about the safety net programs which had been established in the 1960's, and have been substantially decreased in the 1980's. More and more of our patients are medically indigent despite our efforts to provide better care.

I would second what Mr. Harrell said about medicare funding of rural hospitals. It has been increasingly difficult for rural hospitals to attain the level of care of urban hospitals, and many rural hospitals are jeopardized in their financial status.

The rural hospitals do not have the opportunity of turning away patients who are unable to pay. These patients have no other alternative to go to, and we are left with a large number of patients, besides medicare patients, who have no insurance at all.

Medical manpower and resources are currently concentrated in urban areas. A challenge for the next decade is to ensure equal care for rural citizens.

Thank you, Senator Sanford.

Senator SANFORD. Thank you very much. It's customary for us, as the staff goes over this, to send you more questions, and ask you to comment on them for the record. And we might do that, if you don't mind.

I would think it's particularly interesting Dr. McCaleb, to know more about your remarkable program in reducing infant mortality. To move from twenty-four to four is a remarkable move.

Dr. MCCALEB. Northampton had a problem with increasing infant mortality. It had been steadily going up. And when I went to Northampton—it was not a single person effort by any means—the hospital, the local health departments, and other physicians in the area all put in a lot of effort to improve the facilities at the local hospital.

I think East Carolina University deserves a lot of credit for nursing education, and also helping us with taking very difficult patients and managing them.

And it was a good coalescence of a variety of people working at different levels to bring that down.

Senator SANFORD. Also, I think it would be well to put into the record a little bit more about the physicians' assistants. How is that program working out, and where do you get yours? Do they stay, and is the program working as originally envisioned?

Dr. MCCALEB. Our physicians' assistants have been the bedrock of our practice. One of the practices in Littleton, North Carolina, actually started with a physician assistant. He was the most stable person in the practice, remaining there 8 or 9 years. Unfortunately, he was killed. He was trained at Duke. We've had two physicians' assistants in our group that were both trained in South Carolina.

One of my physicians' assistants sees an equal number of patients to what I do. He doesn't have a hospital practice, but rather an office practice. He's very productive, very well accepted by the patients. They call him "Dr. Dan" and don't really distinguish.

We've been very pleased with physicians' assistants. All of our sites use physicians' assistants to some extent. The health department locally also uses physicians' assistants, and I think that's been a major part of the reduction in infant mortality—the use of physicians' assistants who are well trained to recognize problems.

Senator SANFORD. Do you have any additional comments on liability insurance, professional liability insurance, and the effect of that on your particular area and particular practice?

Dr. MCCALEB. Oh, the liability in obstetrical services is a critical problem. I think everybody realizes that.

In our area, in particular, we've lost a tremendous amount of resources. I know of, specifically, eight doctors who have stopped doing deliveries totally in the past 10 years since I've been there.

And it's one of the major problems with getting new people to come in. And the older physicians are dropping out earlier, before age 65. They're quitting in their mid 40's and early 50's. And I think that we're going to find that the problem will get increasingly worse until somebody comes up with a solution.

Malpractice is killing obstetrics. As I said in my testimony, we are having to turn patients away. And it's very difficult to recruit obstetricians.

If they must pay high malpractice premiums, they want to practice in areas where they can make a lot of money. These rural areas are not going to be able to sustain them. A hospital close to us had five family practitioners delivering babies when I started. Their malpractice costs went to $18 thousand apiece. That was going to be $80 thousand for a hospital that did probably three hundred deliveries a year. There's no way to pass that cost on to the patient. It's a huge problem in rural communities.

Senator SANFORD. Is the high insurance rate only attributable to the fact that a doctor is practicing in that field? Or—is it related to the size of his practice. Is it not scaled?

Dr. MCCALEB. It is not scaled, and I think that's a problem. I would like to see something like a surcharge on each delivery that goes into a general fund to pay for obstetrical problem outcomes.

And it's a—at this point, if you do twenty deliveries, or you do two hundred deliveries, your malpractice would be the same. And

that's very difficult in a community where family practitioners have to do other kinds of primary care. You can't do that many deliveries without ruining your family practice.

Senator SANFORD. Well, thank you very much.

Mr. Harrell, you certainly were right about the gap between reimbursement for urban and rural hospitals. And they do that somewhat by arbitrary designation, as you know. Now, we have begun to shrink that gap. But suppose we totally equalized it. That would still leave you with some very severe financial problems, wouldn't it?

Mr. HARRELL. We would be left with some problems that would be very significant, but they would be less significant than what we're currently dealing with.

Senator SANFORD. It might not solve your problem?

Mr. HARRELL. Well, we think it would go a long way, if we have a level playing field where hospitals are reimbursed basically the same for the same type of patient. We think that's very significant indeed, it would give us a equal opportunity to survive as a hospital and serve the needs of our community.

Senator SANFORD. Well, it would, except you still have a differential in volume that must have something to do with overall costs. And I wonder if that's the total answer.

Mr. HARRELL. I don't think it's the total answer, Senator Sanford. We think it's part of the answer. Maybe another part would be diversification and serving the total needs of the community to the extent that resources would allow.

At our hospital, we have tried to diversify into skilled nursing care. We have a 20-bed skilled nursing unit at Duplin General, and we have a 20-bed inpatient adult psychiatric unit. We also have the home care agency based at the hospital in Duplin County. And that has been a valuable resource to have integrated in with the other activities of the hospital.

Senator SANFORD. Well, you noted that additional medicare cuts would harm you, and of course, they would. You'll be pleased to know that the budget resolution does not, as we say, assume any cuts in medicare. So while we've got to go through a couple of other steps in the legislative process, we've started it off by not increasing it, but not decreasing it. That ought to be a promising sign of an improving attitude.

Dr. Lawler, you've talked about a number of interesting things, including lobbying me for three bills.

Dr. LAWLER. Yes, sir.

Senator SANFORD. I'm happy to be lobbied for those three bills. Bills of this kind get drawn by staff, we hope with adequate testimony and adequate advice from practitioners or people in whatever field it might be.

Suppose you did not have those three bills. What do you think the Federal Government might do with its funds to assist rural health care, quite aside from those three bills, or instead of those three bills?

Dr. LAWLER. I think one of the growing problems in rural health care that really hasn't been addressed is the fact that health departments in under-served areas have lost a great many staff positions.

We don't have too many nursing shortage problems as far as high attrition among staff nurses in health departments. There's a great deal of autonomy in the nursing world, and there's a lot of satisfaction. However, health departments, because of block grants and program grants, have lost many funded positions. And I think there really has to be a review and perhaps a modification of fund allotment. For instance, funds for maternal/child health and chronic disease filter down to the health departments, who have, in turn, suffered serious cutbacks because of the new channeling of program monies.

Senator SANFORD. Well, you know, I'm giving you a chance to design what the Federal Government ought to do.

Dr. LAWLER. Well, for instance, I might have to leave rural eastern North Carolina after this.

The health department system in South Carolina is truly a model. South Carolina has one of the most coherent, effective, efficient systems of public health, I think, in the South. It involves controlled diversity. It has good funding to the State. The State serves as a central administrative unit for regional health departments. And if we could, indeed, perhaps, have health departments in North Carolina and other States modeled after the South Carolina health department system, I think our rural health needs would be much better met.

Senator SANFORD. You said good funding to the State. You meant from the State?

Dr. LAWLER. Well, the block funding and program funding to the State, and then from the State to the local health departments.

Senator SANFORD. Well, South Carolina gets essentially the same block grant funding that North Carolina gets.

Dr. LAWLER. I think perhaps it's the way it's handled——

Senator SANFORD. Yes.

Dr. LAWLER. The State level needs to be strengthened.

Senator SANFORD. Very good. Well, I don t think you'll get run out of the State for this. South Carolina has followed us so often, it wouldn't hurt us to follow them once.

Dr. LAWLER. Right.

Senator SANFORD. All right. Let me ask you this general question. You can all comment on it, because it's one of the most touchy questions that there is.

You talk about Medicaid. We need to maintain that program. Perhaps we need to expand this program further. Certainly we need to ensure that it's distributed in an equitable manner.

Some people are insured and others are in between. Sometimes people are covered by Medicaid and many are not.

It's fairly obvious that it would be almost beyond anything that you could anticipate in the Federal budget to have a total health care program. I just don't think there is any way that we could fund it out of the Federal Government.

That's not to say we couldn't perhaps fund it nationally, with States and counties participating as they do, participating in some part of the support.

And most of all—in the Federal Government, health care is the second largest expenditure in the Federal budget, so we are not shirking our share of this. And this is, in many ways, a local prob-

lem. It's not the Federal problem the way the defense budget is that must be done at the Federal level.

This has to be a cooperative program. So you have the Federal Government; you have local governments; you have State governments; and you have private insurance paid by individuals and employers.

What is your concept of how to finance health care so that everybody has a fair chance of fair care? You might all answer that.

Dr. McCaleb. I'll address that a little bit. It think first of all, we have to realize that we cannot finance health care for everybody to the degree our technology allows. It is not possible for everybody with coronary artery disease to have bypass surgery, or everybody with renal failure to have kidney dialysis.

I think it's a very difficult thing, when we get to the point where we have this technology and we aren't able to offer it. I think the first thing that we should focus on, something I think the United States is not terribly good at, is the whole issue of public health and prevention.

I was talking to a delegation from China about our infant mortality problem and how well the U.S. is at managing premature babies. China doesn't have nurseries like we have because they don't have premature babies. They don't have to deal with the problem.

I think the funding has to come on the side of primary care and public health. And I think it has to come with education of both nurses and physicians towards the issue of going into primary care, and not so much into the specialties.

That's, I'm sure, a very hot issue, and a lot of the specialists would disagree.

Senator Sanford. Well, it is.

Mr. Harrell. Well, I think we have medicare and medicaid. The structure is there. It's not perfect. It is serving millions of Americans. And I think we need to build on that.

We have thirty-seven million Americans uninsured currently, I'm told. About three-fourths of those are working. They're gainfully employed.

I think the time has come for mandated health benefits, a basic level of benefits. We need the Federal Government's direction on this. So I would think that I'm in favor of seeing this move along requiring a basic level of coverage for most of our people that are employed today.

That would be my comment.

Senator Sanford. Dr. Lawler?

Dr. Lawler. I would concur with everything that has been said. I think that especially alarming is the rapid increase in the number of working poor who indeed have no mechanism to obtain the type and amount of health care that they really need.

And I would like to see more monies allocated toward health promotion and prevention, especially to groups at risk. And again, I think that the public health sector might be an appropriate body to initiate these activities.

Senator Sanford. Why is it that we have always lagged behind other industrial countries in preventive health care?

Dr. McCaleb. I think we're—we're fascinated by technology and by the razzle-dazzle. If you look at the infant mortality, for example, we're seventeenth among industrialized nations.

We can resuscitate and stabilize smaller babies better than anybody else, but nobody else has smaller babies. We don't have the regionalized perinatal care services established as thoroughly as they should be. We don't believe in providing prenatal services to every woman who is pregnant in this country, thus preventing the kinds of problems that arise with small babies.

We don't prevent hypertension and diabetes. We don't aggressively go after those conditions and we wind up with patients in renal failure because their hypertension has been uncontrolled, their diabetes has been poorly controlled.

We don't believe in nutrition. You know, we don't have good nutritional programs. I don't know the answer. I think we are technologists; we like technology.

Senator Sanford. Do you want to take a shot at that?

Mr. Harrell. I'll pass on that one, Senator.

Senator Sanford. Well, of course, in nursing, you're very much concerned with preventive measures and preventive education. What is it we ought to be doing that we're not doing?

Dr. Lawler. I think perhaps reinstituting support to the nursing programs, so that they can expand the areas of concentration. Particularly, nurse practitioner training is needed to meet the health needs of the rural communities.

Funding some nursing models, nursing centers which offer services for health promotion and prevention would be a positive step.

Senator Sanford. Well, thank you very much, and thank all of you for coming. It's been a great help, and we appreciate your taking the time to prepare such good testimony and being here today with us.

Dr. McCaleb. Thank you, Senator.

Mr. Harrell. Thank you, Senator.

Dr. Lawler. Thank you.

Senator Sanford. Now, I'd like to ask the other two panel members if they would please come forward.

While we're getting in place here, I'd like to introduce several members of my staff who are here.

Mary Ann Triplett is the State Field Director, and is generally racing across the State to make certain that whatever can be done in Washington to help North Carolina, will be done.

Her very able assistant, Alice Glover, put this meeting together. Alice has been down here for several days, making sure that everything was in place.

Waverly Land is a special fellow on loan to us, an expert on the budget. He has been extremely helpful to me in trying to design some new approaches to budget-making. And we're very fortunate to have him on all too brief, but nonetheless to have him on assignment to our office.

Judy Love is the person who has really put this hearing together from start to finish, gathering all the testimony. When I opened my Senate office, she came to work as a legislative assistant, concerned with legislation. She is also my special assistant for the Budget Committee.

Prior to that, for some 10 years, she worked for the State of North Carolina's office in Washington, concerned with health matters. So she knows not only a great deal about healthcare, but she's been working with the State, and knows this from a broader perspective than most people in Washington.

Prior to that time, Judy was a counselor in health-related work. The hardest thing she ever did was being a counselor for alcoholics in Boston. Anybody that can survive that, can survive Washington.

I want to express my deep gratitude for what she's done in putting this hearing together, Judy Love.

Now, we have our second panel. Jim Bernstein has done as much as anyone to promote quality rural health care in this State. He's nationally known for his innovativeness, for his knowledge in this area. And the State of North Carolina is lucky to have him. And we are lucky to have him here this morning representing the State of North Carolina.

Walter Shepherd is here to talk about an innovative preventive health care outreach program called the Community Health Advocacy Program, or CHAP. This is a cost-effective effort to reduce unnecessary health care problems. The program is currently operating in a few of our counties. Several States and even foreign countries are interested in CHAP, and I believe this program deserves all the attention that it can get.

We're so glad to have you here this morning. I'll ask Jim Bernstein if he will lead off.

STATEMENT OF JAMES BERNSTEIN, CHIEF, OFFICE OF HEALTH RESOURCES DEVELOPMENT, NORTH CAROLINA DEPARTMENT OF HUMAN RESOURCES

Mr. BERNSTEIN. Thank you, Senator. I appreciate Senator Sanford's interest in gathering information on the important rural health care issues our country faces, and am honored to present testimony on behalf of North Carolina's rural citizens.

While rural health care in North Carolina and across the country has improved dramatically over the last 15 years, still a lot more needs to be done. I have submitted more full testimony, and so will go through mine, cutting as I go.

In order to provide the background to help us understand today's problems, I will briefly review the recent history of rural health care in North Carolina, and the problems we have faced over the years.

While the history of rural health care in North Carolina is rich in detail, I think three significant developments stand out. Before I discuss these developments, I would like to note a common feature. All three were State initiatives. And I think there would be few, if any arguments to the statement that all three have paid off.

North Carolina's health care delivery system is stronger and provides higher quality care than would have been possible without them.

The first important rural health care development in the State was the creation of the East Carolina University [ECU] Medical School in the early 1970's. In its relatively short lifetime, the school, under the leadership of Dr. Laupus, has already made sig-

nificant contributions in the delivery of health care in the rural areas of our State.

ECU physicians, trained in family—in family practice residency, have increased the supply of family physicians to previously underserved areas, and they have improved the overall quality of care received by citizens in these areas.

Citizens from rural counties throughout the State are grateful for the high quality medical care benefits they are reaping from this fine institution.

The second notable health care development in North Carolina was the funding of the State Area Health Education Centers [AHEC] program, recognized by many as the best of its kind in this country. The AHEC's, as they're called, was established in 1974, and continued to play an enormous role in physician recruitment efforts in rural areas.

The AHEC statewide educational programs, technical assistance, regional resource centers and so on have created a far more attractive climate for physicians who were reluctant to go to rural areas for fear of being isolated from their peers and from further education.

The third development was the creation of the North Carolina Office of Rural Health Services in 1973. The Office of Rural Health Services emerged from recognition that rural citizens lacked access to primary health services.

Using State funds, the Office of Rural Health Services helped establish rural health centers, and provided assistance in accomplishing the many tasks related to the development and operation of a health clinic. Forty-five such centers, owned and operated by nonprofit community organizations, have been established across the State.

Rural Health Services is now one of our four major activities that have been incorporated into a newly formed Office of Health Resources Development. This office is considered the focal point for rural health-related services in North Carolina.

Because of its demonstrated importance in the resolution of rural health problems, I wish to devote the next few minutes to a more detailed discussion of these activities.

The primary responsibility within the office, the physician recruitment—are the physician recruitment program, the rural health services section, community hospital technical assistant program and State health planning.

The combination of these activities provides a comprehensive package of assistance to rural areas of North Carolina that suffer from un-met need for medical care. I would like to briefly summarize the office's activities that have had a direct impact on rural health care.

Rural Health Services. I have already noted that—the forty-five rural health centers this program has developed. There are a few features of these centers which deserve special attention.

The health centers are controlled by community boards. This community model has since been duplicated in other areas of the country. Second, in the early days, all of the health centers were usually staffed by family nurse practitioners and physicians' assist-

ants [PA's], with supervision and backup from one or more physicians practicing in nearby communities.

The family nurse practitioners and PA's are now widely accepted and respected in North Carolina.

In addition to managing the development and operation of the forty-five State-initiated rural health centers, rural health services is also the liaison agency for two Federal programs, the National Health Service Corps and the 330 Community Health Centers Program.

In North Carolina, we are fortunate to have eighteen community health centers under the 330 Program. These centers provide much needed services to many of our most medically under-served rural communities.

Rural physician recruitment activities across the State are centralized within the Office of Rural Health Services Development. To date, seven hundred and thirty-six physicians have been placed in North Carolina through this program. We hope to place about fifty physicians in rural communities this coming year. In order for us to fill fifty positions, we need a pool of four hundred and fifty physicians to begin with.

The next program is the Community Hospital Technical Assistants Program. This program was initiated in 1985, in response to the emerging crisis in our rural community hospitals.

Rural hospitals are experiencing poor financial health. This program works with individual hospitals to improve their ability to sustain reasonable profit margins by becoming more cost effective, more cost efficient, and by developing alternative sources of income.

I think the first project we were asked to undertake was to work with the county commissioners to close a hospital. We learned a lot that first time around that, hopefully, we don't have to learn again.

In addition to the State effort, the North Carolina Hospital Foundation, which is a part of the hospital association, with funding support from the Duke Endowment, has also developed a community hospital technical assistance program. The Foundation has assisted forty two small and rural hospitals to develop long-range plans that will strengthen their financial viability.

The State's technical assistants program and the Hospital Foundation's program are working together for a common objective, to ensure the availability of quality inpatient services to our rural citizens.

While the cost to the State for these programs has not been great, the benefits to the communities and individuals are clear. I should note that of our forty-five health centers that we have initiated, the State only contributes financial help to fifteen. The rest of them are all financially self-sustaining from the fees that come in from patients and from insurance.

Despite the success of its rural health initiatives, North Carolina is still facing significant problems in delivering health care to its rural population. At this time, I'd like to focus my discussion on these problems.

HEALTH MANPOWER

I've already mentioned the shortage of physicians in rural areas. I am pleased and proud of the State's progress in recent years. However, the future does not look good.

Perhaps the single most important barrier to future physician recruitment efforts is the recent Federal cutback in the National Health Service Corps Program. On average, over a 4-year period, our recruitment staff has a hundred and ninety physician placement requests per year from a hundred and twenty communities. With an annual candidate pool of four hundred and fifty physicians, we have been able to place an average of sixty-one physicians in rural communities.

In 1985, fifty-four of our seventy-three placements were from the National Health Service Corps. In 1986, the number was forty-nine of sixty three. In 1987, twenty-eight of fifty-four. And in 1988, only nine of fifty-three.

Next year, North Carolina will be competing for two hundred and forty-one National Health Service Corps scholarship recipients available to the Nation, of which only thirty-six will be family practice specialists. From such a limited pool, we are figuring we will get one.

Other manpower issues have been talked about by Dr. Lawler and Mr. Harrell, so I won't say too much about the nursing shortage except that it is severe. We're also suffering from shortages of physical therapists, occupational therapists, and many other professionals.

MEDICALLY INDIGENT

The poor are with us always. In 1988, as in 1968, one of the major health care issues is providing access to health care services for those who cannot afford to pay. We need to confront the problems of providing care to medicaid recipients, the uninsured, and the under-insured.

In 1987, North Carolina was one of twenty-five States which opted to expand medicaid coverage of children and pregnant women, and one of only, eight States which adopted presumptive eligibility programs. In 1988, we will face the problem of funding the increased medicaid costs. Not surprisingly, a large number of medicaid recipients and medically indigents reside in our rural counties.

Population statistics reveal that when compared to their more urban counterparts, rural residents are more likely to be older, more likely to be living on incomes below the poverty level, more likely to have a lower per capita income, more likely to be unemployed, and more likely to be working for an employer who does not offer health insurance coverage.

We figure that there are about nine hundred and fifty thousand people each day who do not have some sort of health insurance coverage. We are trying to do something about it in a small way.

The North Carolina legislature has established a health care trust commission to address the special problems of providing health insurance coverage to employees of small businesses.

RURAL HOSPITALS

Mr. Harrell has already spoken eloquently about the problem of his hospital, and it mirrors most of our rural hospitals. The significant feature of that hospital is that so much of their revenue is dependent upon medicare and medicaid public funding.

RECOMMENDATIONS

I have enumerated a number of problems in access and delivery of health care services in rural areas. It is a sad commentary that most of these problems existed 5 years ago, and they have continued almost unabated. Forces such as declining hospital occupancy, inflation, inadequate reimbursement, a growing indigent population, and increasing elderly population and manpower shortages are formidable opponents.

Up to this point, I have concerned my remarks on what is being done. I'd like to end my presentation with my recommendations on what needs to be done.

First, and I think probably most important for our State, the Federal Government needs to reevaluate the impact of its decision to cut back the National Health Service Corps program. Particular attention should be given to analyzing the policy—the policy's impact on access to health care in rural areas. I like the new Federal loan repayment program that they've put out, but they certainly have not funded it sufficiently to do—to have much impact in this country.

Second, the Health Care Financing Administration need to encourage demonstrations and experiments at the local level. Health care is a local and regional concern. People receive health care in or close to their own communities. And those communities even within the same State, are never identical. HCFA needs to be more lenient in approving medicare and medicaid waivers so that meaningful solutions to local problems can be sought.

Third, increased funding is needed for the 330 Community Health Centers Program. The 330 sites provide care to an ever increasing number of our neediest citizens with never increasing funds. These programs really take care of the poorest of the poor.

Fourth, parity needs to be achieved in medicare reimbursement of urban and rural hospitals. Rural rates are lower than urban rates because average rural hospital costs are lower than urban costs in the baseline pre-DRG period. And Mr. Harrell has addressed this already.

Fifth, the Federal Government needs to reauthorize Title VII of the Public Health Service Act. I think that's Senator Kennedy's bill that covers funding for the health—to health professions, student loans and the AHEC program.

There are five areas where the Federal Government might look to assure better health care in the short-term for rural Americans. However, it is clear from my experience that the Federal Government cannot be effective without clear State and local commitments to these same goals.

We in North Carolina are committed to work and cooperation with Washington towards these goals of accessible and affordable quality health care in rural America.

Thank you, Senator.

Senator SANFORD. Well, thank you very much. Judy reminded me that I did not point out that you are the Chief of the Office of Health Resources Development for the State of North Carolina Department of Human Resources.

I apologize for that. And just in case I didn't adequately identify Walter Shepherd, he's the Assistant Dean and Director of the Center for Health Services, Research, and Development, the School of Medicine at East Carolina University.

[The prepared statement of Mr. Bernstein follows:]

TESTIMONY OF JAMES BERNSTEIN

UNITED STATES SENATE BUDGET COMMITTEE
HEARING ON RURAL HEALTH CARE

GREENVILLE, NORTH CAROLINA
MAY 2, 1988

Good Morning. My name is James Bernstein and I am Chief of the Office of Health Resources Development in the North Carolina Department of Human Resources.

I appreciate Senator Terry Sanford's interest in gathering information on the important rural health care issues our country faces, and I am honored to present testimony on behalf of North Carolina's rural citizens. While rural health care in North Carolina, and across the country, has improved dramatically over the last 15 years, still more needs to be done.

HISTORICAL PERSPECTIVE ON RURAL HEALTH CARE IN NORTH CAROLINA

In order to provide the background to help us understand today's problems, I will briefly review the recent history of rural health care in North Carolina and the problems we have faced over the years. While the history of rural health care in North Carolina is rich in detail, I think three significant developments stand out. Before I discuss these developments, I would like to note a common feature: all three were state initiatives. And I think there would be few, if any, arguments to the statement that all three have "paid off." North Carolina's health care delivery system is stronger and provides higher quality care than would have been possible without them.

The first important rural health care development in North Carolina was the creation of the East Carolina University Medical School in the early 1970s. In its relatively short lifetime, the School has already made significant contributions in the delivery of health care in the rural areas of our state. ECU physicians trained in the Family Practice Residency Program have *increased the supply of family practice physicians* to previously underserved areas and they have *improved the overall quality of care* received by citizens in these areas. Citizens from rural communities throughout the state are grateful for the high quality medical care benefits they are reaping from this fine institution.

The second notable health care development in North Carolina was the funding of the State Area Health Education Centers Program, recognized by many as the best of its kind in the country. The "AHECs" were established in 1974 and continue to play an enormous role in physician recruitment efforts in rural areas. The AHEC statewide educational programs, technical assistance, regional resource centers, and so on have created a far more attractive climate for physicians who were reluctant to go to rural areas for fear of being isolated from their peers and from further education. Every

physician, midlevel practitioner, and nurse in the state knows that there is an AHEC person to call on for educational help.

The third development was the creation of the North Carolina Office of Rural Health Services in 1973. The Office of Rural Health Services emerged from the recognition that rural citizens lacked access to primary health care services. Using state funds, the Office of Rural Health Services helped establish rural health centers and provided assistance in accomplishing the many tasks related to the development and operation of a health clinic. Forty-five such centers, owned and operated by non-profit community organizations, have been established across the state. The success of the Office of Rural Health Services in extending primary health care services to rural areas led to the Office's expansion: rural health services is now one of four major program activities that have been incorporated into the newly-formed Office of Health Resources Development . OHRD is considered the focal point for all rural health related services in North Carolina. Because of its demonstrated importance in the resolution of rural health problems, I wish to devote the next few minutes to a more detailed discussion of OHRD activities.

THE N.C. OFFICE OF HEALTH RESOURCES DEVELOPMENT

The primary areas of responsibility within the Office of Health Resources Development are Rural Health Services, the Rural Physician Recruitment Program, the Community Hospital Technical Assistance Program, and State Health Planning. The combination of all these program activities provides a comprehensive package of assistance to rural areas of North Carolina that suffer from an unmet need for medical care. The State had taken an unusual initiative in funding one office to perform these functions and in permitting sufficient flexibility to allow the Office to respond to community concerns. I would like to briefly summarize the OHRD activities that have a direct impact on rural health care.

Rural Health Services. I have already noted the 45 rural health centers this program has developed. There are a few features of the health centers which deserve special mention. First, I am proud to say that North Carolina pioneered the idea of *community ownership and participation* in the development of primary medical care centers in rural areas. The health centers are controlled by community boards. This community model has since been duplicated in other areas of the country. Second, in the early days, the health centers were usually staffed by *Family Nurse Practitioners (FNPs) and Physician Assistants (PAs)* with supervision and backup from one or more physicians practicing in nearby communities. FNPs and PAs are now widely accepted and respected health care practitioners but in 1973 using midlevel professionals to staff health centers was a daring approach to solving the physician shortage problem in these areas.

In addition to managing the development and operations of 45 state-initiated rural health centers, Rural Health Services is also the liaison agency for two federal programs: the National Health Service Corps and the 330 Community Health Centers Program. In North Carolina, we are fortunate to have 18 community health centers

under the 330 Program. These centers provide much needed services to many of our most medically-underserved communities.

Rural Physician Recruitment. Rural physician recruitment activities across the state are centralized within the Office of Health Resources Development. To date, 736 physicians have been placed in North Carolina through this program. Almost all of the state rural health centers now employ full-time physicians in addition to their FNPs and PAs. We hope to place about 50 physicians in rural communities this coming year. In order to fill these 50 physician positions, we will need a pool of at least 450 physicians from which to recruit.

Community Hospital Technical Assistance. This program initiative was established by the Governor in 1984 in response to the emerging crisis in our rural community hospitals. Rural hospitals are experiencing poor financial health. This Program is working with individual hospitals to improve their ability to sustain reasonable profit margins by becoming more cost-effective, more cost-efficient, and developing alternative sources of income.

In 1987, the Office of Health Resources Development, through State Health Planning, was able to effect a change in state health policy that allows an acute care hospital to convert ten beds or ten percent of its licensed acute care bed capacity, whichever is greater, for use as "short-term skilled nursing care" beds. While it is too early to assess the policy's success, such policies give rural hospitals an opportunity to diversify their services and to obtain reimbursement for beds which otherwise would have been unused.

The North Carolina Hospital Foundation, with funding support from the Duke Endowment, has also developed a community hospital technical assistance program. The Foundation has assisted 42 small and rural hospitals to develop long-range plans that will strengthen their financial viability. The state's technical assistance program and the Hospital Foundation's program are allied through a common objective: to assure the availability of inpatient services to our rural citizens.

RURAL HEALTH CARE SUCCESSES

While the cost to the state for these programs has not been great, the benefits to communities and individuals are clear. For most of the patients served by the rural health centers and our rural health care providers (MDs, FNPs, and PAs), these initiatives represent a real improvement in access to health care. The centers and the physicians are placed where a demonstrated, documented demand for services exists. The following data are indicative of the achievements of the Office of Health Resources Development.

- 45 rural health centers have been established.

- Of the 45 rural health centers, only 15 are still receiving financial contributions from the state.

• 736 physicians have been placed in underserved communities throughout the state.

• 16 of our smallest and most rural hospitals have formed three alliances for the purpose of developing cooperative agreements for shared services programs.

RURAL HEALTH CARE PROBLEMS

Despite the successes of its rural health initiatives, North Carolina is still facing significant problems in delivering health care to its rural population. At this time I would like to focus my discussion on problems awaiting solutions.

Health Manpower. I have already mentioned the shortage of physicians in rural areas. I am pleased, and proud, of our progress in recent years. North Carolina, compared to other states, has had considerable success in the area of physician recruitment. In 1975, 32 of our 100 counties had a population to primary care physician ratio of 4000+ : 1 primary care physician; by 1986, the number of counties with this high ratio was reduced to 8. However, the future does not look good. Perhaps the single most important barrier to future physician recruitment efforts is the recent federal cut-back in the National Health Service Corps Program. On average, over a 4 year period, our recruitment staff has 190 physician placement requests per year from 120 communities. With an annual candidate pool of 450 physicians, we have been able to place an average of 61 physicians per year in rural communities. In 1985, 54 of our 73 placements were from the NHSC; in 1986, 49 of 63 placements were NHSC physicians; in 1987, NHSC provided 28 of 54 physicians; and in 1988, only 9 of a total of 53 placements were from the NHSC. Next year, North Carolina will be competing for 241 NHSC scholarship recipients available nationally, of which only 36 will be Family Practice specialists. From such a limited pool, we will be fortunate to have 1 NHSC placement.

Compounding the physician recruitment problem in rural areas is the financially precarious position of most of our rural hospitals. The recruitment of physicians and other health professionals in counties with small, financially-distressed hospitals has been extremely difficult. Several of our communities are at high risk of losing obstetrical services while several other counties will soon be at real risk of having no medical care available within a reasonable distance. Highest priority needs to be given to assisting these communities in restructuring their health care delivery system.

Lately there has been a good deal of media attention to the "nursing shortage." This shortage exists for other specialized medical personnel as well, including physical therapists, respiratory therapists, and so on. Rural areas now need to be competitive with urban areas in clinical excellence, professional growth opportunities, salary and benefits in order to recruit and retain qualified health professionals. This is almost an impossible situation for financially-distressed rural hospitals to deal with. Although the health manpower shortage has already been described as a "crisis," in my opinion, we are seeing only the tip of the iceberg.

The Medically Indigent. "The poor are with us always" -- in 1988, as in 1968, one of the major health care issues is providing access to health care services for those who cannot afford to pay. We need to confront the problems of providing care to Medicaid recipients, the uninsured and the underinsured.

In 1987, North Carolina was one of 25 states which opted to expand Medicaid coverage of children and pregnant women and was one of at least 8 states which adopted "presumptive eligibility" programs. In 1988, we will face the problem of how to fund the state's share of increased Medicaid costs.

Not surprisingly, a large number of Medicaid recipients and medically indigent reside in our rural counties. Population statistics reveal that when compared to their more urban counterparts, rural residents are more likely to be older, more likely to be living on incomes below the poverty level, more likely to have a lower per capita income, more likely to be unemployed, and more likely to be working for an employer who does not offer health insurance coverage.

Currently, more than 15% of North Carolinians are uninsured or underinsured, a figure which experts predict will increase rapidly during the coming years. Programs to cover this segment of the population are being proposed at the state and federal levels. The North Carolina legislature has established a Health Care Trust Commission to address the special problem of providing health insurance coverage to employees of small businesses.

One of the greatest pressures shared by North Carolina rural hospitals stems from their responsibility to serve all patients regardless of ability to pay. As the ranks of the uninsured and medically indigent grow, this responsibility becomes a financial burden which further threatens their financial stability. For the uninsured person, this means increasing problems in access to care. For those who do seek and receive care, there are unpaid bills. In 1985, North Carolina hospitals wrote off an estimated $242 million dollars in charges to charity care and bad debt. The rural hospitals are the hardest hit -- the residents of their service areas are more likely to be poor and more likely to be employed by a business not offering health insurance coverage.

Rural Hospitals. A recurring theme throughout my presentation today has been the plight of our rural hospitals. You have heard about their poor financial health, their recruitment problems, their need to innovate, and their burden of caring for the indigent. If the decline of rural hospitals continues as the experts predict, not only will the future role of rural hospitals in the delivery of health care be in serious jeopardy, but the economic base of the rural community will be seriously jeopardized as well. In rural communities, the health care system provides access to needed medical services and is also a primary source of employment. The hospital is often the first or second largest employer in a rural county. The ability of rural hospitals to sustain reasonable profit margins, and thus ensure their continued existence, will become increasingly dependent on their ability to become more cost-effective, to become more cost-efficient, and to develop alternative sources of income.

Hospital trend data reveal the extent of the decline of our hospitals, particularly the smaller, rural hospitals:

- Small hospitals (less than 100 beds) have had the most dramatic decline in occupancy rate between 1981 and 1986. 70% of these small hospitals saw occupancy rates drop by more than 25%.

- The smallest hospitals (less than 50 beds) had the most dramatic decline in discharges, days of care, and average length of stay between 1981-1986. These hospitals suffered an average decline of almost 40% in the number of patients served, and about a 45% decline in the days of care provided.

- Hospitals that serve a large proportion of elderly patients are very dependent on payment policies set by the federal Medicare program. The data clearly show that smaller hospitals have a larger share of elderly patients than do larger hospitals.

- Smaller hospitals are more likely to have lost statewide market share in the period 1981-1986, while large hospitals are more likely to have gained market share.

About half of the income received by most hospitals comes from the Medicare and Medicaid programs -- for rural hospitals, the average income from both these sources is probably more than 50%. That means that the government is their largest payer. Given the Medicare prospective payment system (DRGs), that also means that the payer is also setting the prices. Medicare DRG payments have risen about 1% annually, while the costs to hospitals of providing care has risen 5 to 6% annually. Medicare profit margins, if they ever existed for rural hospitals, have plummeted.

RECOMMENDATIONS

I have enumerated a number of problems in access and delivery of health care services in rural areas. It is a sad commentary that most of these problems existed 5 years ago and they have continued almost unabated. Forces such as declining hospital occupancy, inflation, inadequate reimbursement, a growing indigent population, an increasing elderly population, and manpower shortages are formidable opponents. However, North Carolinians are fortunate to have institutions such as four medical schools, the AHEC program, the Duke Endowment, and the Office of Health Resources Development to address these problems. In addition, we feel we have worked well with federal programs such as the National Health Service Corps and the 330 Community Health Centers Program in coordinating interventions.

In his letter of invitation to address the Senate Budget Committee through this hearing, Senator Sanford hoped that the speakers would "focus attention on what is being done in North Carolina as well as what needs to be done." Up to this point, I

have concentrated my remarks on the "what is being done." I would like to end my presentation with my recommendations on "what needs to be done."

First, the federal government needs to re-evaluate the impact of its decision to cut-back and eventually eliminate the National Health Service Corps Program. Particular attention should be given to analyzing the policy's impact on access to health care in rural areas.

Second, the Health Care Financing Administration needs to encourage demonstrations and experiments at the local level. Health care is a local and regional concern -- people receive health care in or close to their own communities and those communities, even within the same state, are never identical. HCFA needs to be more lenient in approving Medicare and Medicaid waivers so that meaningful solutions to local problems can be sought.

Third, increased funding is needed for the 330 Community Health Centers Program. The "330 Sites" provide care to an ever-increasing number of our neediest citizens with never-increasing funds.

Fourth, parity needs to be achieved in Medicare reimbursement of urban and rural hospitals. Rural rates are lower than urban rates because average rural hospital costs were lower than urban hospital costs in the baseline pre-DRG period. This policy compounds the difficulty of the rural hospital whch is already experiencing a decline in patient admissions and an increase in the percentage of underinsured older patients.

Senator SANFORD. Now, Mr. Shepherd, we'll hear you.

STATEMENT OF WALTER L. SHEPHERD, ASSISTANT DEAN AND DIRECTOR, CENTER FOR HEALTH SERVICES, RESEARCH, AND DEVELOPMENT, SCHOOL OF MEDICINE, EAST CAROLINA UNIVERSITY

Mr. SHEPHERD. Senator, I'd like to thank you and the Budget Committee for providing me with the opportunity to discuss rural health. As a North Carolinian, it makes me especially proud to see that our own Senator has taken the lead in making rural health problems an issue to be dealt with by the Senate.

What I would like to do today is to make some general comments about rural health care, and then focus on several important things that the East Carolina University School of Medicine has been doing.

First, let me say that when one discusses the problems of rural health, it must be done in the context of the larger problem of rural life in general. The problems of rural America are interrelated; therefore, we must also look at the issues of development, economics, politics and so forth.

Second, and in the same vein, one cannot and should not isolate just one issue of rural health. In other words, physician, nursing and other health manpower shortages, the problems of the small community hospital, cost and reimbursements for medical care and so forth need to be seen together.

I could probably characterize rural health problems as, in reality, being an incomplete system of health care delivery. Solutions to real health problems need to be directed at making this system complete. Partial solutions are just that; they're partial and stopgap at best. Rural America cries out for and needs a complete system of health care.

At the School of Medicine, we have sought to address the problems in our region, in particular, in such a manner. The School of Medicine at East Carolina University has taken the approach that we must look at the entire health care system of this area.

To that end, we have aggressively attempted to identify, in our admissions process, young men and women from many different backgrounds who openly express their desire to provide service to the medically under-served.

We particularly focus their training in the primary care specialties, although we have programs in surgery and other specialties which serve to complement the primary care system.

It is equally important to train surgeons, pediatricians, obstetrician/gynecologists, internists, psychiatrists, and other specialists to practice in rural areas, as it is important to train family physicians.

Studies have shown that much of the decline in rural health care has been the absence of a rural support service system for the community physician. We provide our students in residence with learning experiences that will carry them into the small community setting.

I'm also very proud to say that fine physicians like Dr. Jane McCaleb are also members of our faculty.

By being familiar with small community hospitals and practices, our students are more inclined to feel comfortable in considering such places as permanent practice sites.

We also feel that it is important to develop a regional system of health care. To that end, we, in partnership with Pitt County Community—with Pitt County Memorial Hospital, have developed a medical center in Greenville, which provides services unique to this region.

Open heart surgery, high risk maternal and infant care, cancer diagnosis and treatment, air ambulance services, regional trauma services, and the latest in diagnostic and therapeutic care technology—these programs were absent 10 years ago.

We, along with the Area Health Education Centers, have worked closely to help community physicians, other health professionals, and hospitals in the region upgrade their skills and knowledge through extensive, continuing education opportunities.

Our faculty and staff spend much time and effort in community outreach activities. For example, we have specialists in neonatal medicine who travel throughout the region, providing assistance.

We have specialists in geriatric medicine who work closely with other health care providers to develop regional services. We have established summer camps for children with cancer and diabetes. And we provide technical expertise to communities seeking to locate physicians and to develop medical clinics.

We have taken our responsibility to generally improve the health care status of this region very seriously. I believe that upon closer examination, there are many programs which can serve as models for other rural settings.

And let me provide you with one very specific example, and that is our Community Health Advocacy Program. As I said before, is what we're looking at is the development of a complete health care system.

The complete health care system includes appropriate levels of technology at both ends. We need the high-tech. We need the magnetic resonant imagining. We need the CT scanners. We need the open heart surgery.

We also need the family physicians. But we also need to have a network, a system in place in the community. And this is one of the things that we've sought to do.

My particular position with the school of medicine has been very, very, very unique in that Dean Laupus has given me very wide latitude in going into the community.

After many years of involvement with physician recruitment, establishment of rural health clinics, and working with Jim and his staff, and with other more traditional forms of health care programming, we felt the need to be a little bit more fundamental in our approach.

We have found that many programs were heavily dependent upon funding and outside personnel for their success. In fact, when the money and the personnel dried up, the program usually collapsed as well. There also appeared to be a need to enhance the relationship between patients, physicians, and the health care system in general, and to provide linkages between the various levels.

In examining statistics of health care in eastern North Carolina, we found that in the year 1912, a hundred and fifty-one communities in a twenty-nine county region had physicians. In 1988, that number has now gone to eighty-five.

So almost half the number of communities that had physicians, don't have them anymore. And nine of those communities are served only by physicians from the National Health Service Corps. And therefore I would like to echo what Jim said in terms of the Federal support for manpower development and placement in rural America.

In 1921, 85 percent of all of the physicians in eastern North Carolina were family physicians. In 1988, that number is 21 percent.

In 1906, the average age of a physician in eastern North Carolina was 39. In 1988, the average age of a physician in eastern North Carolina is 50. And the average age of a family physician in eastern North Carolina is 53.

What, then, could we do to have a lasting impact on the health of rural residents? How could we get into these communities that had loot physicians?

As we looked around and examined the resources available, we found that perhaps the greatest resources are those that are represented here today; that is, the people. The people of this region, the people of rural America are its real strengths. And so building upon basic concepts of community, neighborhoods, and volunteerism, we set out to develop a program that we call the Community Health Advocacy Program.

Community Health Advocacy is a concept derived from the idea of neighbor helping neighbor. It utilizes the best in the community and neighborhood-wide values of friendship, trust, mutual responsibility, and the desire for community improvement.

And although CHAP is primarily health advocacy, it has widespread implications for every part of community life, by giving people the information and tools with which to make intelligent and appropriate decisions, even when lacking the necessary resources.

CHAP is a means by which people in community settings can gain control over their own individual destinies. They are enabled to make intelligent choices. They're able to articulate their needs. And they're able to assume more significant roles in their own communities.

CHAP is a volunteer based program. There is no outside funding coming in to support this effort. Advocates and trainers alike volunteer their time and services. No one receives payment, nor is there any cost to the participant.

CHAP is a community-owned program. Although conceived and directed by the ECU School of Medicine, a major goal has been to transfer the ownership to the local area as soon as possible. Through local advisory groups and the widespread involvement of agencies and organizations, this transfer can be realized after only a short period of time.

The essence of CHAP is the identification of concerned community members, people who are already in the community, in networks of providing help and assistance. Once provided with infor-

mation on first aid, CPR, environmental health and safety, nutrition, medical consumerism, and other topics, the advocates are ready to become leaders for better health care in their community and neighborhood.

While the overall purpose of CHAP is to improve health and well being of people living in areas of medical need, its benefits are far more reaching. CHAP is a volunteer program. CHAP is community-owned. CHAP identifies and utilizes existing community networks.

Most communities already have concerned members who are routinely sought out by their neighbors for help and advice. Once these people are identified, these individuals participate in a comprehensive, 13 week training program. As advocates, they go on to become proponents for better health care and human services in their neighborhood.

CHAP can be adapted to fit local situations and solve local needs. CHAP is designed to endure because it is volunteer, because you are using the existing resources that are already there. Because you are making the ownership of this activity local, it stays.

CHAP results in better inner-agency coordination. It's a front door program which strives to involve all area agencies and organizations, and enables them to work together on specific projects. Advocates become involved in all aspects of community life. They provide transportation. They have become board members of health department and local service agencies. Their contacts which we have documented have resulted in referrals at least 20 percent of the time. They have developed community oriented projects, such as community gardens, exercise group, blood pressure screenings, and so forth.

Let me just briefly review a scenario which exemplifies the kind of action in which an advocate can be involved. As industry and jobs leave some of our rural areas, a large toll is extracted on the local residents. People are without jobs, and there is a resulting trickle-down effect.

Let's take a man, a husband, a father with two children. He loses his job. After weeks or months of unsuccessful job hunting, he become despondent and soon loses his self-esteem. He turns to the bottle in an attempt to regain what he has lost.

Also as a result, he sees his wife and children as adversaries, and he begins to abuse them both verbally and physically. In communities where there are advocates, the local mental health center has trained them to identify these problems before they result in major problems.

The advocate, who can be a neighbor or even a relative, knows that many problems can follow a lost job. Therefore, they intervene before it's too late, either as soon as the man loses his job or when he begins his heavy drinking.

Thus we've helped to develop one of the critical components of the health care system, the large base of the community, neighbor helping neighbor.

CHAP is now in five counties of eastern North Carolina, and developing in three others. It is also being adopted by groups in Mississippi and Arkansas, and is being considered for South Carolina and the state of Israel.

To reemphasize what I said in my initial comments, we're dealing with an entire system of health care, a system whereby the base is built upon the community. The people in the community comprise the community of advocates. It is composed of the nurses, of the allied health professionals, of the small community hospitals, the regional medical centers. We in rural America need to cry out for the opportunity to develop this complete system.

Thank you.

Senator SANFORD. Thank you very much.

[The prepared statement of Mr. Shepherd follows:]

School of Medicine
East Carolina University
Greenville, NC 27858-4354

Walter L. Shepherd

ASSISTANT DEAN
AND DIRECTOR

CENTER FOR
HEALTH SERVICES,
RESEARCH AND DEVELOPMENT

(919) 551-2785

I would like to thank Senator Sanford and the Senate Budget Committee for providing me with the opportunity to discuss rural health. As a North Carolinian, it makes me proud that the Senator has taken the lead in making rural health problems an issue to be dealt with by the Senate.

What I would like to do today is to make some general comments about rural health in general and then focus on several important things that the East Carolina University School of Medicine has been doing.

First, let me say that when one discusses problems of rural health it must be done as part of the larger problem of rural life in general; the problem of rural America are inter-related. Therefore, we must also look at issues of development, economics, politics, and so forth.

Second, and in the same vein, one cannot and should not isolate just one issue of rural health. In other words, physician, nursing and other health manpower shortages, the problems of the small, community hospital, costs and reimbursement for medical care, and so forth need to be seen together. I could probably characterize rural health problems as, in reality, being an incomplete system of care delivery.

Solutions to rural health problems need to be directed at making the system complete. Partial solutions are just that--they're partial and stop-gap at best. Rural America cries out for and needs a complete system of health care.

At the School of Medicine, we have sought to address the problems in our region in such a manner.

The School of Medicine at East Carolina University has taken the approach that we must look at the entire health care system of this area. To that end, we have aggressively attempted to identify in our admissions process young men and women from many different backgrounds who openly express their desire to provide service to the medically underserved. We particularly focus on their training in the primary care specialties; although we have programs in surgery and other specialties which serve to complement the primary care system. It is equally important to train surgeons, pediatricians, obstetrician/gynecologists, internists, psychiatrists, and other specialists to practice in rural areas as it is to train family physicians. Studies have shown that much of the decline in rural health care has been the absence of regional support services for the community physician.

We provide our students and residents with learning experiences that will carry them into the small community setting; by being familiar with small community hospitals and practices, they are more inclined to feel comfortable in considering such places as permanent practice sites.

We also feel that it is important to help develop a regional

system of health care. To that end, we, in partnership with Pitt County Memorial Hospital, have developed a medical center in Greenville which provides services unique to this region: open-heart surgery, high-risk maternal and infant care, cancer diagnosis and treatment, air ambulance services, regional trauma services, and the latest in diagnostic and therapeutic care technology.

We, along with the Area Health Education Centers, have worked closely to help community physicians, other health professionals, and hospitals in the region to upgrade their skills and knowledge through extensive continuing education opportunities.

Our faculty and staff spend much time and effort in community outreach activities. For example, we have specialists in neonatal medicine who travel throughout the region providing assistance, we have specialists in geriatric medicine who work closely with other health care providers to develop regional services, we have established summer camps for children with cancer and diabetes, and we provide technical expertise to communities seeking to locate physicians and to develop medical clinics.

We have taken our responsibility to generally improve the health care status of this region very seriously. I believe, that upon closer examination, there are many programs which can serve as models for other rural settings. Let me provide you with one very specific example:

The Community Health Advocacy Program: An Example of What Can Be Done

My particular position with the School of Medicine is one that requires me to examine the health care problems of our rural region and to develop specific interventions; all of the issues presented previously are routinely addressed. After many years of involvement with physician recruitment, establishment of rural health clinics, and other more "traditional" forms of health programming, we felt the need to be a bit more fundamental in my approach. We had found that many programs were heavily dependent on funding and outside personnel for their success. In fact, when the money and personnel "dried up", the program usually collapsed as well. There also appeared to be a need to enhance the relationship between patients, physicians, and the health care system in general and to provide linkages between the various levels.

What, then, could be done to have a lasting impact on the health of rural residents? Using the basic concepts of neighborhoods, volunteerism, and low cost, we set out to develop such a program. The Community Health Advocacy Program is just one way in which health care can be brought to rural, isolated areas.

What is Community Health Advocacy?

Community Health Advocacy is a concept derived from the idea of "neighbor helping neighbor". It utilizes the best in the community- and neighborhood-wide values of friendship, trust, mutual responsibility, and the desire for community improvement. And although CHAP is primarily health advocacy, it has widespread implications for every part of community life by giving people the information and tools with which to make intelligent and appropriate decisions, even when lacking the necessary resources. Community Health Advocacy is most definitely a community development process.

CHAP is a means by which people in community settings can gain control over their own, individual destinies. They are enabled to make intelligent choices, they are able to articulate their needs, and they are able to assume more significant leadership roles in their own communities.

CHAP is a volunteer-based program. Advocates and trainers alike volunteer their time and services; no one receives payment, nor is there any cost to the participants.

CHAP is a community-owned program. Although conceived and directed by the East Carolina University School of Medicine, a major goal is to transfer the ownership to local control as soon as possible. Through local advisory groups and the widespread involvement of agencies and organizations, this transfer can be realized after only a short period of time. The School of Medicine then assumes a supportive role.

The essence of CHAP is the identification of concerned community members (primarily those who are routinely sought out by their neighbors for advice and help) and their participation in a comprehensive training program. Once provided with information on first aid, CPR, environmental health and safety, nutrition, medical consumerism, and numerous other topics, the Advocates are ready to become leaders for better health care in their community or neighborhood.

While the overall purpose of CHAP is to improve the health and well-being of people living in areas of medical need, its benefits are more far reaching:

o CHAP is a volunteer-based program.
Advocates and trainers alike volunteer their time and services; no one receives payment, nor is their any cost to the participants.

o CHAP is a community owned program.
Through the commitment and involvement of local sponsors, advisory groups, and lay leaders, local ownership is assumed very early on in the development of the

program.

o CHAP identifies and utilizes existing community networks. Most communities already have concerned members who are routinely sought out by their neighbors for help and advice. Once identified, these individuals participate in a comprehensive training program, and as Advocates, go on to become proponents for better health care and human services delivery in their community or neighborhood.

o CHAP can be adapted to fit local situations and solve local needs. Although there is a standard development process, each CHAP program is unique and reflects the needs and the priorities of the community. Curriculum localization allows for community identified needs to be addressed and guarantees a program with local characteristics.

o CHAP is designed to endure. Because CHAP'S startup and maintenance costs are minimal, monies to cover these costs can be easily generated by existing community groups and organizations. The ability of the program to operate independently of outside funding not only enhances the feelings of local ownership but involves more people in sustaining the program.

o CHAP results in better inter-agency coordination. CHAP is a "front-door" program which strives to involve all area agencies and organizations, and enables them to work together on a specific project.

o CHAP is a high-visibility program. Because it involves local people and organizations, CHAP has excellent appeal to the media. In one of the pilot projects, CHAP received more than 3 1/2 pages of newspaper coverage including two front-page headlines and two editorials.

o CHAP encourages cooperation. CHAP provides the opportunity for local health and human service agencies and the people they serve to establish mutually beneficial relationships. Advocates act as facilitators not only for the

communities, but for the agencies as well.

o CHAP is a people program. CHAP was not designed for any one particular group, and is equally applicable regardless of one's race, sex, or socio-economic status. Advocates represent and serve a cross-section of the community.

Advocates become involved in all aspects of community life. They provide transportation, they have become board members of health departments and local social service agencies, their contacts, which we have documented, result in referrals to physicians at least 20% of the time, they develop community-oriented projects, such as community gardens, exercise groups, blood pressure screenings, and so forth.

Let me review a brief scenario with you.

As industry and jobs leave some of our rural areas, a large toll can be extracted on the local residents--people are without jobs and there is a resulting trickle-down effect. Let's take a man, a husband, a father with two children. He loses his job. After weeks or months of unsuccessful job-hunting, he becomes despondent and soon his self-esteem goes. He turns to the bottle in an attempt to regain what he has lost. Also as a result, he sees his wife and children as adversaries, and he begins to abuse them, both verbally and physically. In communities where there are Advocates, the local mental health center has trained them to identify these problems before they result in major problems. The Advocate, who can be a neighbor or even a relative, knows that many problems can follow a lost job; therefore, they intervene before it's too late--either as soon as the man loses his job or when he begins his heavy drinking.

What we've done is to help the development of one of the critical components of the health care system: the large base of the community, neighbor helping neighbor.

CHAP is now in five counties of Eastern North Carolina and developing in three others. It is also being adopted by groups in Mississippi and Arkansas and is being considered for South Carolina and the State of Israel.

Policy Analysis

Center for Health Services Research and Development

East Carolina University
School of Medicine

ISSUES OF HEALTH CARE
IN THE
RURAL SOUTH

Prepared for:
U.S. Senate Budget Committee

May 2, 1988

HSRD Health Services Research and Development

Issues of Health Care in the Rural South

by
Walter L. Shepherd
Assistant Dean & Director
Center for Health Services Research & Development
School of Medicine
East Carolina University
Greenville, NC

Paper/Presentation
Prepared for
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on
Rural Health

May 2, 1988
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Introduction

I would like to thank Senator Sanford and the Senate Budget Committee for providing me with the opportunity to discuss rural health. As a North Carolinian, it makes me proud that the Senator has taken the lead in making rural health problems an issue to be dealt with by the Senate. In fact, I believe that this is the first time that there have been hearings on this topic conducted in the field by the Budget Committee.

I would also like to say that I am wearing two hats this morning. My first hat is that of being an Assistant of the School of Medicine; I would like to discuss with you some of the school's concerns as well as some of the things that the school has done to address those concerns. Secondly, I am here as the Project Director of a program called Community Health Advocacy, a program which seeks to mobilize existing community resources to solve health and human service problems in rural areas.

Overview

This presentation will address the issues of health care in rural areas of the Southern United States, although much of what is said can be generalized to any rural area in the country. The examination of these issues has been developed not only from a review of published information but also from my own experiences and research in rural Eastern North Carolina. This, by no means, can be considered to be comprehensive in nature, nor does it seek to address problems or issues that may be unique to specific areas. There are also limitations in the amount of research

directed at rural areas of the South. Most data come from national studies from which the subsets of "South" and "Non-metropolitan" are obtained.

(NOTE: The "South" has been defined according to the grouping by the U.S. Census Bureau. Therefore, it includes data from states that are not traditionally considered to be Southern: Maryland, Delaware, West Virginia, District of Columbia. In some cases, particularly Maryland, Delaware, and District of Columbia, the urban nature tends to skew composite data; excluding those states changes the summary picture for the South.)

I would like to begin by emphasizing a couple of very important points: 1) the problems of the rural America are inter-related. In other words, the problems that we find in health care cannot and should not be examined without also looking at the issues of development, economy, politics and so forth. An in-depth examination of all of these issues could also lead us into a very interesting discussion of cause and effect; which is the cause and which is the effect, 2) in this same context, one cannot and should not isolate just one issue of rural health to focus on. Rural health problems are inter-related and, therefore, should be looked at as such. Basically, what we're talking about is a "systems" approach to health care development. One part of the "system" cannot be developed without corresponding development in the other parts. I believe that it is very important to see rural health care as something that needs to be developed at all of its levels. In fact, rural health care can probably be characterized as health care that is inadequate, incomplete, and inaccessible.

Let me use statistics on Eastern North Carolina to illustrate some of the problems to which I refer.

Using archival data to compare with our current situation, we find that in 1912 physicians practiced in 151 different communities and towns of Eastern North Carolina; today, physicians practice in 85 communities and 9 of those communities are served only by the federally-funded National Health Service Corps. In 1921, 85% of the physicians in this area were family or general practitioners; this decreased to 64% in 1950, 42% in 1969, 27% in 1979, and today--21%. In 1906, the average age of the physician in this area was 39 years old; today the average age is 50 years and 53 years for the family and general practitioners. In 1921, 8.3% of the physicians in this area were black; today, 3.7% of them are.

The East Carolina University School of Medicine

The School of Medicine at East Carolina University has taken the approach that we must look at the entire health care system of this area. To that end, we have aggressively attempted to identify in our admissions process young men and women from many different backgrounds who openly express their desire to provide service to the medically underserved. We particularly focus on their training in the primary care specialties; although we have programs in surgery and other specialties which serve to complement the primary care system. It is equally important to train surgeons, pediatricians, obstetrician/gynecologists, internists, psychiatrists, and other specialists to practice in rural areas as it is to train family physicians. Studies have shown that much of the decline in rural health care has been the

absence of regional support services for the community physician.

We provide our students and residents with learning experiences that will carry them into the small community setting; by being familiar with small community hospitals and practices, they are more inclined to feel comfortable in considering such places as permanent practice sites.

We also feel that it is important to help develop a regional system of health care. To that end, we, in partnership with Pitt County Memorial Hospital, have developed a medical center in Greenville which provides services unique to this region: open-heart surgery, high-risk maternal and infant care, cancer diagnosis and treatment, air ambulance services, regional trauma services, and the latest in diagnostic and therapeutic care technology.

We, along with the Area Health Education Centers, have worked closely to help community physicians, other health professionals, and hospitals in the region to upgrade their skills and knowledge through extensive continuing education opportunities.

Our faculty and staff spend much time and effort in community outreach activities. For example, we have specialists in neonatal medicine who travel throughout the region providing assistance, we have specialists in geriatric medicine who work closely with other health care providers to develop regional services, we have established summer camps for children with cancer and diabetes, and we provide technical expertise to communities seeking to locate physicians and to develop medical clinics.

We have taken our responsibility to generally improve the health care status of this region very seriously. I believe, that upon closer examination, there are many programs which can serve as models for other rural settings.

The Community Health Advocacy Program: An Example of What Can Be Done

My particular position with the School of Medicine is one that requires me to examine the health care problems of our rural region and to develop specific interventions; all of the issues presented previously are routinely addressed. After many years of involvement with physician recruitment, establishment of rural health clinics, and other more "traditional" forms of health programming, I felt the need to be a bit more fundamental in my approach. I had found that many programs were heavily dependent on funding and outside personnel for their success. In fact, when the money and personnel "dried up", the program usually collapsed as well.

What, then, could be done to have a lasting impact on the health of rural residents? Using the basic concepts of neighborhoods, volunteerism, and low cost, I set out to develop such a program. The Community Health Advocacy Program is just one way in which health care can be brought to rural, isolated areas.

What is Community Health Advocacy?

Community Health Advocacy is a concept derived from the idea of "neighbor helping neighbor". It utilizes the best in the community- and neighborhood-wide values of friendship, trust, mutual responsibility, and the desire for community improvement.

And although CHAP is primarily health advocacy, it has widespread implications for every part of community life by giving people the information and tools with which to make intelligent and appropriate decisions, even when lacking the necessary resources. Community Health Advocacy is most definitely a community development process.

CHAP is a means by which people in community settings can gain control over their own, individual destinies. They are enabled to make intelligent choices, they are able to articulate their needs, and they are able to assume more significant leadership roles in their own communities.

CHAP is a volunteer-based program. Advocates and trainers alike volunteer their time and services; no one receives payment, nor is there any cost to the participants.

CHAP is a community-owned program. Although conceived and directed by the East Carolina University School of Medicine, a major goal is to transfer the ownership to local control as soon as possible. Through local advisory groups and the widespread involvement of agencies and organizations, this transfer can be .mt6 realized after only a short period of time. The School of Medicine then assumes a supportive role.

The essence of CHAP is the identification of concerned community members (primarily those who are routinely sought out by their neighbors for advice and help) and their participation in a comprehensive training program. Once provided with information on first aid, CPR, environmental health and safety, nutrition,

medical consumerism, and numerous other topics, the Advocates are ready to become leaders for better health care in their community or neighborhood.

While the overall purpose of CHAP is to improve the health and well-being of people living in areas of medical need, its benefits are more far reaching:

- o CHAP is a volunteer-based program. Advocates and trainers alike volunteer their time and services; no one receives payment, nor is their any cost to the participants.

- o CHAP is a community owned program. Through the commitment and involvement of local sponsors, advisory groups, and lay leaders, local ownership is assumed very early on in the development of the program.

- o CHAP identifies and utilizes existing community networks. Most communities already have concerned members who are routinely sought out by their neighbors for help and advice. Once identified, these individuals participate in a comprehensive training program, and as Advocates, go on to become proponents for better health care and human services delivery in their community or neighborhood.

- o CHAP can be adapted to fit local situations and solve local needs. Although there is a standard development process, each CHAP program is unique and reflects the needs and the priorities of the community. Curriculum localization allows for community identified needs to be addressed and guarantees a program with local characteristics.

- o CHAP is designed to endure. Because CHAP'S startup and maintenance costs are minimal, monies to cover these costs can be easily generated by existing community

groups and organizations. The ability of the program to operate independently of outside funding not only enhances the feelings of local ownership but involves more people in sustaining the program.

o CHAP results in better inter-agency coordination. CHAP is a "front-door" program which strives to involve all area agencies and organizations, and enables them to work together on a specific project.

o CHAP is a high-visibility program. Because it involves local people and organizations, CHAP has excellent appeal to the media. In one of the pilot projects, CHAP received more than 3 1/2 pages of newspaper coverage including two front-page headlines and two editorials.

o CHAP encourages cooperation. CHAP provides the opportunity for local health and human service agencies and the people they serve to establish mutually beneficial relationships. Advocates act as facilitators not only for the communities, but for the agencies as well.

o CHAP is a people program. CHAP was not designed for any one particular group, and is equally applicable regardless of one's race, sex, or socio-economic status. Advocates represent and serve a cross-section of the community.

How CHAP Operates

Before initiating a CHAP project in an area, local sponsorship must be obtained and approved. It is the function of these local sponsors to insure that local officials, organizations, and agencies are consulted. Presentations are made to county commissions, medical societies, civic organizations, and key community individuals and groups; a strong base of local support and endorsement is obtained prior to the selection of

communities and Advocates. It is believed that this support is required for the continued success of any program, and that it is essential that local ownership be emphasized and arranged early in the process.

Communities selected as target areas are determined through extensive community analysis, community interviews, and by examining several factors such as: isolation, rurality, dependency proportions, educational attainment levels, extent of community identity and solidarity, existence of community organizations, and strength of community leadership. Community rankings are established and final selections are made in consultation with county, agency, and organization leaders.

Potential Advocates are selected by conducting interviews with random community members, consulting community leaders, and through personal interviews of those being recommended. Individuals whose names are provided by multiple sources are given primary consideration. However, final selection is made based on the matching of the individuals' characteristics with the desired qualities of an Advocate. It is essential that Advocates be well-liked and respected, that they put the interests of their community before their own interests, that they have a willingness to learn new information, that they express a desire to share information with their neighbors, and that they have a tradition of being sought out by community members.

Once selected, the prospective Advocates must make a commitment to participate in a formalized training program conducted by CHAP staff and local agency personnel.

Local Organizational Development

The first step in the development of a CHAP project is the selection of a **Steering Committee**. The members of this committee, composed of 2-5 county representatives, agree to provide local sponsorship for the CHAP program and to take full responsibility for program implementation, including securing local monies to finance the project, selecting target communities and Advocates, appointing and supervising a local coordinator, and developing a resource directory. Another important role of the Steering Committee is to generate a strong base of local support and endorsement prior to the initiation of the project. Local officials, organizations, and agencies are consulted and presentations are made to county commissions, medical societies, civic organizations, and key individuals, and groups.

An outgrowth of this community-wide educational process is the formulation of an **Advisory Committee**. Made up of 8-10 representatives from various county agencies and organizations, the primary functions of this group are to identify and prioritize county needs, assist in the selection of Advocate trainers, and most importantly, to act as contact persons for Advocate referrals.

The next step in the development of a CHAP program involves the process of **Community Selection** - the identification of target sites within a county which have the greatest health and socio-economic needs and are, accordingly, the most appropriate locations for CHAP projects. This process requires extensive

community analysis through the examination of such factors as: isolation, rurality, dependency proportions, educational attainment levels, extent of community identity and solidarity, existence of community organizations, and strength of community leadership. Based on the results of this analysis, community rankings are computed and final selections are made by the Steering Committee in consultation with county, agency, and organizational leaders.

Advocacy selection represents the final step necessary in developing the organizational framework for a CHAP project. Potential advocates are identified through interviews with random community residents and community leaders, and individuals whose names are provided by multiple sources are given primary consideration. However, final selection is based on the results of personal interviews which indicate if the candidates' characteristics match the desired qualities of an Advocate. It is essential that Advocates be well-liked and respected, that they put the interests of their community before their own, have a willingness to learn and share information, and have a tradition of being "sought out" by community members.

Training Program

One of the functions of the Advisory Committee is to assist in the **selection of trainers** for the curriculum instruction. The many agencies and organizations represented on the Committee provide a substantial base of expertise which can be readily utilized in teaching the Advocates. Early in the development

phase of the program, each Committee member agrees to take responsibility for an applicable section of the curriculum, with actual intra-agency assignments being agreed upon as soon as possible.

Each trainer participates in a brief **Trainer Orientation** session which emphasizes appropriate educational techniques. Because the Advocates are adults with varying levels of education, particular emphasis is given to non-formal methods of instruction such as role playing, values clarification, small group discussions, and case studies, etc. There is no formal testing or grading of the Advocates, so methods of instruction which insure proficiency and understanding should be used. To date, there has been little difficulty in "training the trainers" as most are already involved in some type of educational activity as part of their professions.

Each trainer is provided with a copy of their respective section from the CHAP manual, as well as course goals and objectives. All trainers are asked to use the CHAP manual as a basis for instruction, but are encouraged to expand on the subject matter when they feel appropriate.

Training Sessions and Average Time Allocation

The total course content can be taught in either 12 or 13 weeks, which would be equivalent to a total of 2160 minutes or 2340 minutes depending upon local needs. A basic format for training is provided; however, it should be emphasized that this is not a "cookbook" approach. There is considerable room for the localization of the curriculum and a block of 180 to 360 minutes

to be used for course content specific to the community in which the training is being conducted.

Introduction to CHAP	45 mins.
Introduction of CHAP Staff and Advocates	30 mins.
Problems in Our Community	45 mins.
Health Risk Appraisals	30 mins.
Registration/Questions	45 mins.
Mental Health What is mental health? Worry Anxiety Stress Depression Suicide Mental Retardation	60 mins.
Family Violence	30 mins.
Substance Abuse	60 mins.
Anatomy & Physiology	60 mins.
Health Risk Appraisals Review	45 mins.
Chronic Disease I What is chronic disease? Hypertension Cardiovascular Disease Cerebrovascular Disease	60 mins.
Chronic Disease II Kidney Disease Cancer Diabetes	60 mins.
Communicable Disease	60 mins.
Risk Reduction	75 mins.
Nutrition: Food and Good Health	45 mins.
Nutrition: Consumer Issues	30 mins.
Nutrition: Needs of Special Groups	45 mins.
Aging	60 mins.
First Aid Introduction	180 mins.

Fractures, Sprains, and Strains Sudden Illnesses and Symptoms Burns and Poisoning Bites (Animal and Insect) Bandaging Wounds Shock Heat and Cold Injuries Other Injuries	
CPR	180 mins.
Maternal and Child Health Pregnancy Child Health Child Development	90 mins.
Family Planning	30 mins.
Teen Pregnancy	15 mins.
Parenting and the Family	30 mins.
Sexually Transmitted Diseases	15 mins.
Community Needs Assessment	30 mins.
Health Services and the Informed Consumer	45 mins.
Environmental Health	45 mins.
Home and Farm Safety	30 mins.
Vital Signs	60 mins.
Dental Health	60 mins.
Medications	60 mins.
Community Projects	45 mins.
Community Resources	90 mins.
Role of the Advocate	90 mins.
Local topics or expansion of programmed material	180 mins. or 360 mins.

The History of CHAP

The Community Health Advocacy Program (CHAP) is a project

that was developed within the Center for Health Services Research and Development at the East Carolina University School of Medicine in Greenville, North Carolina. The school, located in the geographical center of a large rural region, has been involved in training young men and women for medical careers in medically underserved areas and in helping small communities and hospitals with the development of rural health care networks. Although the origins of CHAP can be traced to 1968, the recent foundations for CHAP were begun in early 1979, with the program itself formalized in the Fall of 1983. It was at this time that the School of Medicine and Project Concern International of San Diego, California agreed to collaborate on a pilot project in Eastern North Carolina. This pilot project began with the first training program being completed in the Spring of 1985 with the graduation of fourteen Advocates from three communities in Hertford County, North Carolina. A second class of twenty-two persons from five additional Hertford County communities graduated in December, 1985. A third class, in adjacent Northampton County, was graduated in November, 1986 with 20 Advocates completing the training. With the completion of this "pilot" phase, CHAP has continued to grow and develop through expansion to numerous other counties and communities in North Carolina and elsewhere.

In January of 1987, CHAP entered its second phase of development with the establishment of the National Training Program for Community Health Advocacy in Greenville, North Carolina. The objectives of the National Training Program are to continue to develop projects in Eastern North Carolina with the

co-sponsorship of Project Concern and to provide technical and supportive services to others desiring to establish CHAP projects in North Carolina and throughout the country. In addition to North Carolina, future projects are being developed or discussed in Mississippi, Arkansas, South Carolina, and the State of Israel.

The National Training Program has developed the capability of training local sponsors, providing the necessary development and training materials, and acting as technical consultants to new projects. The National Training Program is equipped to provide modules for each part of the program (Development, Training, and Advocate Support) and is able to teach individuals or groups how to develop their own CHAP programs through workshops, audio-visual training aids, and other materials.

In addition, the National Training Program is currently developing and expanding upon modified models of CHAP which can be utilized in worksites, senior centers and villages, schools, and other "community"-type settings.

National Training Program Staff

The Assistant Dean of the School of Medicine serves as both the CHAP Director and Project Director for the Project Concern Eastern North Carolina Program. His role is to determine the overall direction of the program, manage the local "politics", coordinate the community and Advocate selection processes, and manage all research activities. Project Concern employs a full-time Health Educator who functions as the Training Coordinator under the direction of the CHAP Director. Additionally, the

support staff, a community developer, secretarial assistance, and artists/designers, are contributed by the School of Medicine. Student interns from several disciplines are routinely assigned to the CHAP program to gain field experience. .

Advocate Activities

Since the first Advocates were trained, records have been maintained relative to their activities. The following anecdotes represent a cross-section of the services being provided by Community Health Advocates in their communities:

EXAMPLES OF ADVOCATE COMMUNITY-ORIENTED PROJECTS

Established a diabetic support group and linked it with the health department and the hospital.

Routinely conduct blood pressure screenings in their communities and participate in blood pressure screenihg clinics held by the county health department.

Established numerous community exercise clubs and informal groups.

Established a mini-CHAP program in several community churches after Sunday services. Uses agency and organization personnel who participated in CHAP training.

Established a community recreation program in a small town.

Obtained gifts of land and a tractor and have established a community garden maintained by the elders and the teens in a small town.

Established an Elder-Teenager matching program. Each older person and teen in the town are matched with each other for routine support and "sharing".

Maintain a child-safety seat program in a small town.

Helped to establish and maintain a community food bank.

Function as health data collectors for the local health department.

INDIVIDUAL ADVOCATE ACTIVITIES

85 y/o Female. Extremely ill. Said she felt like she was dying.

Convinced her to go to hospital emergency. Called rescue squad. Stayed with her until settled in the ICU.

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15 y/o Male. Boy started making strange noises and choking.

Bent him over and tapped him on the back. The candy was dislodged and he began to breathe normally.

---

72 y/o Female. Advocate was contacted by an acquaintance in an adjacent county. Relayed the plight of a woman whose husband was hospitalized and who could not administer her own insulin. Knew of no one who could help but had heard of CHAP.

Advocate called the local CHAP Coordinator in her county, who, in turn, contacted the CHAP Coordinator for the county in which the diabetic woman lived. An Advocate who lived in her community was called and he was able to go to her home and straighten out the problems.

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60 y/o Male. Man passed out when he bent over to move the golf tee marker.

Took pulse and checked breathing. Stayed with man and told co-worker to go and call the rescue squad.

---

38 y/o Female. Obesity.

Listened to woman's problems. Told her to see doctor about appropriate weight loss and exercise plan. Made her aware of what facilities and programs were available in the local area.

---

16 y/o Female. Young lady's period was late, and she was afraid that she was pregnant. Boyfriend does not want her to use the pill.

Talked to her about the risks of premarital sex and about birth control. Told her about services available at the health department.

---

28 y/o Female. Lady with two children whose husband had threatened to kill her.

Arranged for her and two children to go to a shelter. Worked with her and her husband about going to the mental health center for assistance. Later, talked her out of a suicide attempt.

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57 y/o Female. Woman's daughter was writing bad checks. Had gotten into trouble for not paying for stereo equipment and had subsequently left town. Left ill mother to deal bad check problem and with two small children.

Worked with woman and creditors about having daughter make payments on bad checks. Because of this daughter returned home.

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16 y/o Female. Sexual abuse in the home--incestuous relations.

Worked with girl and helped her obtain assistance from local mental health center personnel.

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42 y/o Female. Improperly dressed and obviously disoriented woman observed walking the streets.

Took woman to her parents home. She was then taken to the state mental hospital for continued treatment.

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60 y/o Male. Man was a cancer patient who had several unconcerned children. Needed help with personal hygiene and homemaking activities.

Suggested that family work with Department of Social Services for either placement in a facility or for assistance home care assistance.

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75 y/o Male. Suffering from effects of severe cold temperatures.

Heated up the home and then took the man to his physician.

---

22 y/o Male. Could not read or write with any proficiency.

Talked with man and referred him to an adult basic education program.

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21 y/o Female. Unemployed, transient, single parent. Needed to return "home". Abused and abandoned by boyfriend. Child taken away from her by natural father. No place to stay. No money.

Arranged for temporary housing and referred to mental health center, employment security commission, and social services.

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48 y/o Female. Feels nervous all the time. Afraid something bad is going to happen. Thinks that she might have cancer again. Withdrawn and lonely.

Told her about crisis line at mental health center. Talked with her about counseling services available and offered to take her to one.

---

36 y/o Female. Problem managing budget. Needed immediate assistance with rent and utilities.

Helped to develop family budget. Referred to employment security commission and social services department.

---

80 y/o Male. High blood pressure and several general problems

associated with aging.

Discussed importance of taking medications. Called social services and asked that they routinely check up on him.

---

77 y/o Female. Feet were badly swollen.

Called daughter and had her take mother to doctor for check-up.

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52 y/o Female. 16 y/o daughter had dropped out of school to live with boyfriend.

Talked with daughter about the realities of life. Discussed importance of remaining in school and the value of education. She decided to return.

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24 y/o Male. Was doing work in the neighborhood. Had an accident and needed to be taken immediately to hospital.

Took young man to hospital and waited for him to be treated.

---

60 y/o Female. Had recent mastectomy and was not pleased with her progress. Depressed. Not pleased with what doctor had been telling her.

Suggested the names of women whom she contact who had mastectomies. Encouraged her to consult with another physician and obtain additional advice.

---

63 y/o Female. Requested information about what she needed to ask when she visited the doctor's office.

Reviewed several items that had been covered in CHAP training regarding how to ask questions and what to ask and how to best relay information about symptoms.

---

76 y/o Male, 65 y/o Female. Depression. Problems regarding nutrition.

Encouraged couple to continue their appointments at the mental health center. Suggested that they begin mild exercise such as

walking. Recommended a nutritious diet plan; took them a meal to serve as an example.

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55 y/o Female. Depressed and withdrawn due to conflict with friends and unemployment.

Advised her to seek help with her private physician or mental health center. Suggested that she go to social services department to receive financial advice and help.

---

67 y/o Male. Called Advocate and described chest pains, pain in arm, and upper stomach.

Called the rescue squad. Gathered up all medication the man was taking and rode with him to the hospital. Contacted the man's children and informed them of the situation.

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56 y/o Male. Trying to stop smoking.

Discussed the dangers of smoking. Provided him with printed information on smoking and discussed it.

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71 y/o Male, 65 y/o Female. Daughter has cancer.

Provided them with printed materials on cancer and discussed it with them. Suggested some resource people who might be able to provide additional information.

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25 y/o Female. Woman was pregnant and complained of constant thirst.

Instructed her to go visit her doctor and have her blood sugar level checked. She was not aware of several problems which could occur when pregnant.

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32 y/o Female. Has lung cancer and high blood pressure.

Talked with her about exercise and proper diet. Encouraged her to have her blood pressure routinely checked. Suggested that she find someone to talk with when depressed.

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33 y/o Female. Individual was concerned about childhood diseases that her child may come into contact with at pre-school.

Advised her to be sure that child had all appropriate immunizations. Instructed her to also contact her family doctor for more specific information on diseases and in getting the necessary shots.

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63 y/o Male, 66 y/o Female. Both persons had hypertension.

Suggested that they change their diets and to stop smoking and to cut down on the amount of alcohol that they used.

---

74 y/o Male. Son was an alcoholic and would threaten family members and neighbors with knives and guns when he was drinking.

Suggested to the family that they give him a choice between being sent to jail or obtaining professional alcohol counseling from the mental health center. As a result, the son entered an alcohol treatment program.

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67 y/o Male. Man was being treated for alcoholism and was attending Alcoholic Anonymous.

Talked with him about alcohol abuse and encouraged him to keep attending the AA meetings.

---

15 y/o Female. Girl was expelled from school. She refused to go home.

She was taken into the Advocates home and counseled. Notified her parents and talked with all of them about resolving the family and school problems.

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85 y/o Female. Wanted a diet for herself due to a heart problem.

Obtained a special diet plan from the nutritionist at the health department.

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82 y/o Female. Ulceration of lower right leg.

Notified her doctor and then took her to the hospital for admission per his instructions.

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75 y/o Female. Woman had fallen to the floor. Crawled to phone and called Advocate.

Advised her to remain on floor. Called rescue squad and her family doctor. Then went to the woman's home to assist and to wait for the ambulance.

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56 y/o Female. Woman weighed 300 pounds and felt dizzy.

Took her blood pressure. Reading was 180/110. Called her family doctor.

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54 y/o Male. Foot was cold and was turning black.

Called family doctor immediately.

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35 y/o Male. Wanted blood pressure checked. Obtained reading of 210/110.

Called the man's family doctor immediately. Made an appointment for him to be seen that day.

---

70 y/o Female, 55 y/o Female. Mother and daughter having problems over daughter's boyfriend. As a result, the daughter moved out.

Counseled both of them. Encouraged both to listen to each other. They were able to reconcile their differences.

---

78 y/o Female. Woman was living alone and was disabled. No food in house.

Went shopping for the woman and cooked her a nutritious meal. Notified her out-of-town family. The family then arranged to have someone come and live with her.

---

24 y/o Female. Woman felt dizzy and wanted her blood pressure checked.

Took blood pressure which was found to be 190/110. Contacted a neighbor and asked that she take her immediately to the doctor's office.

---

75 y/o Female. Disabled woman complained of shortness of breath and severe chest pain.

Called rescue squad and had them take her to emergency room. Called her family and had them meet her at the hospital.

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77 y/o Female. Having problems with her finances and taxes.

Contacted the county aging office and took her to the county tax office for assistance.

---

77 y/o Male. Complaining of shortness of breath and wheezing. Also expressed concern about his finances and the fact that someone seemed to be withdrawing money from his bank account.

Took him to his doctor for a check-up. Then took him to his bank and around town to take care of his bills. Contacted social services to help him with his problems.

Group of five persons. All of them had diabetes and hypertension and wanted information on diet and nutrition.

Contacted the local health department and arranged for them to send a nurse and nutritionist to meet with the group. A film was shown, questions answered, took blood sugars on each, and checked blood pressures.

---

36 y/o Female. Concerned because 20 y/o son was on drugs.

Took mother and son to the mental health center for assistance.

---

20 y/o Female. Single mother had supplemental food sources cut back. Had poor financial management skills and was in need of advice on nutrition.

Advised her about finances. Worked on a nutritious, yet economical dietary plan for her and family.

---

29 y/o Female. Recent accident victim. Was left without funds and unable to work.

Counseled her about finances. Provided her with emergency aid. Referred to the social services department for assistance.

ADDITIONAL SUPPORTING MATERIALS

Introductory Comments

Before engaging in a detailed discussion, several comments should be made to set the stage:

1) At present, there is the lack of an adequate database to use to address rural health care problems. Current data is either aggregated or piecemeal.

2) We might want to seriously consider the concept of Persistent Low Income Areas (PLI's). In 1979, 231 nonmetropolitan counties were classified as PLI with a total population of 3.5 million. Most were located in the Southeastern and Appalachian regions. Comparative infant mortality rates were: 18.6 for PLI areas, 13.8 for non-metro, 13.7 for metro.

3) There is a vicious cycle of poverty and poor health with a reinforcing effect.

4) The increase in MD supply in PLI areas was half of that experienced in other nonmetro areas during the 1970's. There are no incentives to locate in PLI areas (isolation, lower reimbursement systems, etc.).

5) It is important to recognize that geographic barriers and population density will always create rural health care problems. Rural health care will always be less accessible and more costly to deliver.

6) General unmet needs in rural areas continue to be:

   a) Concern for the adequate distribution of health care resources.

b) Concern over the continued viability of the rural, community hospital.

c) Inadequate transportation systems.

d) Access to care for the uninsured and insured poor.

e) Barriers erected in front of population subgroups.

f) Concern for the isolation of rural medical practices.

g) Lack of adequate sources of health information for rural residents.

h) Inability of the rural resident to have any degree of control over his/her own health destiny.

7) Solutions need to be geared toward:

a) Rural transportation systems

b) Rural hospital "systems"

c) MD recruitment and placement (and retention)

d) Massive educational programs

e) Development of community self-help/self-sufficiency

f) Development of an adequate database of information about rural health problems.

I would propose to categorize the major issues of rural health in the South as follows: 1) Availability, 2) Accessibility, 3) Acceptability, 4) Continuity, 5) Quality, 6) Cost. I shall begin by briefly summarizing the problems in each category before engaging in a more detailed discussion.

1) Availability

Areas of the rural South do not share in the adequate distribution of health resources. Only 2 of the 17 Southern states equal or surpass the national average for patient care physicians per 100,000 population. But even of those physicians who do practice in the South, most tend to be located in the metropolitan areas. In Mississippi, for example, only 28.9% of the population reside in metropolitan areas while 59% of the physicians in the state maintain their practice in the urban centers. This problem is true with all other forms of health manpower as well. Many of the federal-state programs directed at solving the problems of distribution (geographic and specialty) have been dropped or curtailed due to the expected physician "glut" of the 1990's.

When one examines the ratio of hospital beds to population, it would appear to be adequate. However, these figures can be deceptive. As with the location of the physicians, the large hospital facilities are found in the urban centers, while the rural areas have the small, less than 100 bed facilicies. That rural areas have any hospitals at all is due, in large part, to the Hill-Burton legislation of 1946. All is not well with these

small hospitals. Data reported in the American Hospital Association's Hospital Statistics, 1985 Edition show that the number of community hospitals with fewer than 100 beds has decreased by 12.7% during the period 1974-84; 48.2% of the hospitals in the South have fewer than 100 beds.

Another major problem facing rural Southerners is the lack of alternatives, both within and between health providers. Therefore, if there is displeasure with one source of medical care, other sources are probably not available.

2) Accessibility

Residents of rural areas have more difficulty in obtaining access to health care than their urban counterparts. Distance from homes to health care facilities can be great; transportation sources may be few. In two separate examinations of this problem for Eastern North Carolina, we found that overall 13.2% of the households in the region did not have an automobile or truck available (from U.S. Census data); in a study examining the health of child-bearing age women, 23.7% were forced to rely upon others for transportation to health care. In most regions of the rural South, including its towns and cities, public transportation does not exist.

Other issues of access may arise depending upon specific attributes of the rural resident. Personal characteristics, such as race, family membership, and age, may limit access to care. The ability or inability to pay for care is an issue by itself.

3) Acceptability

If obtained, is the health care received acceptable?

Respondent-Assessed Health Status, 1982

	Total	All SMSA	Outside SMSA	South
Excellent	39.3	40.6	36.5	36.0
Very Good	25.5	25.9	24.6	24.3
Good	23.8	23.1	25.1	25.2
Fair	8.1	7.5	9.4	10.0
Poor	3.4	2.9	4.4	4.6
Fair/Poor	11.5	10.4	13.8	14.6

Source: U.S. Department of Health and Human Services, National Center for Health Statistics. Current Estimates from the National Health Interview Survey: United States, 1982, pp. 107 & 108.

4) Continuity

Continuity concerns itself with adequate levels of health care and the appropriate utilization of those various levels along with the established relationships between levels. Related directly to the issues of access and availability, continuity is often lacking. Physicians and medical centers to whom patients would be referred are located in the metropolitan areas. Few regional medical centers and physician specialists are located within rural regions. Collegial relations between physicians in rural and urban areas are difficult to maintain; rural physicians may hesitate to refer to urban medical centers; communications between urban and rural physicians and medical centers may be inadequate.

Distribution of Physician Specialists, n.d.

	Metro	Non-Metro
Office-Based Medical Specialties	89.7	10.3
Office-Based Surgical Specialties	86.1	13.9
Office-Based Other Specialties	89.5	10.5

Source: Rudov, Melvin H. and Nancy Santangelo. Health Status of Minorities and Low-Income Groups, p. 26.

5) Quality

The measurement of the quality of health care in the rural South is not easy to obtain. However, those factors that could tend to have a negative effect on quality are present. Physicians in nonmetropolitan areas see 20.4% more patients per week and work longer hours (a quantity versus quality issue). Because there are fewer peers in rural areas, peer review of practices may not routinely occur. Rural areas have been so eager to obtain medical services that they often do not carefully screen physician prospects; rural areas have been popular havens for impaired physicians. Rural residents are so glad to have any care at all that quality tends to be a secondary concern.

6) Cost

The presence of health care services does guarantee treatment. A sizable number of physicians do not participate in the Medicaid program (53.3% in the South do not). And although the average cost of care is less expensive, 50.4% of Southerners must pay for their own medical care without the help of third party payers.

Under the Hill-Burton Act (as a result of which many rural hospitals were constructed), hospitals are required to provide a certain amount of "charity" care. When these hospitals are bought by investor-owned corporations, Hill-Burton obligations can be "bought out", thereby relieving the institution from charity care. Almost 40% of all hospitals in South are now investor-owned or

managed.)

Source of Payment for Medical Care, 1977

	Total	South	Nonmetro	Metro
Family	44.7	50.4	48.4	43.5
Private Insurance	21.6	19.5	20.3	22.0
Medicare	6.9	6.9	7.0	6.9
Medicaid	6.5	3.7	5.3	7.0
Other	20.3	19.6	19.0	20.7

Source: U.S. Department of Health and Human Services, National Center for Health Services Research and Health Care Technology Assessment. "National Health Care Expenditures Study. Data Preview 22."

The Organization of the Rural Health Care System

I refer to the organization of a rural health care system when, in fact, a "system" does not exist nor is there any organization. Therein, lies much of the problem. However, the delivery of health care in the rural South is carried on by organizations and individuals, sometimes working in concert with one another.

Health Care Settings
- Community Hospitals
- Emergency Departments
- Urgent Care Centers
- Private Practice Physician Offices
- Health Departments
- Federally-funded Clinics
- State-funded Clinics
- Other Clinics (charity groups, medical schools)
- Other Practice Settings
- Churches
- Homes
- Other Non-clinical Settings

Health Care Practitioners
- Private Practice Physicians
- National Health Service Corps Physicians
- State and Local Health Department Physicians
- Medical School Physicians
- Nurse Practitioners
- Physician Assistants
- Pharmacists
- Chiropractors
- Religious Healers
- Naturopaths
- Traditional Healers
- Family, Friends, and Neighbors
- Self

In most cases, the health care provided by the physician is preferred. However, when barriers (social, economic, and other) exist, rural residents will examine and utilize other options. The extent of the use of these other options has not been clearly documented. It is also common for rural residents to have more

than one source of routine health care with each source unaware of the use of the other.

ISSUE: The generalized health status of those persons who reside in rural areas of the South tends to be worse than those who reside elsewhere.

(CHART 1)

Chronic Disease Reporting Per 1000 Persons, 1982

	Total	All SMSA	Outside SMSA	South
Heart Disease	74.5	72.4	79.2	79.4
Hypertension	116.9	110.9	129.7	130.1
Cerebrovascular Disease	9.7	9.6	9.7	8.1
Diabetes	25.4	26.9	24.1	28.3

The accuracy of this data may be limited due to the respondent reporting of physician-informed chronic conditions. Undiagnosed conditions are not identified.

Source: U.S. Department of Health and Human Services, National Center for Health Statistics. Current Estimates from the National Health Interview Survey: United States, 1982, pp. 82 & 92.

(CHART 2)

Respondent-Assessed Health Status, 1982

	Total	All SMSA	Outside SMSA	South
Excellent	39.3	40.6	36.5	36.0
Very Good	25.5	25.9	24.6	24.3
Good	23.8	23.1	25.1	25.2
Fair	8.1	7.5	9.4	10.0
Poor	3.4	2.9	4.4	4.6
Fair/Poor	11.5	10.4	13.8	14.6

Source: U.S. Department of Health and Human Services, National Center for Health Statistics. Current Estimates from the National Health Interview Survey: United States, 1982, pp. 107 & 108.

CHART 3

Death Rates per 100,000 Population, 1981

	Heart	Cancer	C-V	Accid	COPD	Pneu	Diab	Liver	Ather	Suic	Perin
Alabama	307.6	183.1	87.9	55.0	25.6	19.9	16.0	10.1	9.8	10.6	9.6
Arkansas	362.3	200.3	98.8	47.2	27.3	24.5	16.1	9.8	12.3	12.5	10.9
Delaware	334.0	208.0	53.9	34.0	22.9	18.4	21.4	10.4	9.9	12.6	12.9
District of Columbia	348.3	254.2	65.6	38.2	21.6	25.4	17.5	39.0	25.6	7.1	23.7
Florida	403.3	239.3	91.4	52.4	36.2	22.7	15.7	17.6	13.6	15.6	9.3
Georgia	289.6	154.6	79.8	52.4	22.0	21.8	13.0	10.5	7.9	12.7	11.1
Kentucky	349.7	189.3	82.3	49.6	31.4	27.4	17.2	9.9	12.8	12.0	9.3
Louisiana	304.8	167.5	73.0	57.8	20.8	16.9	19.1	10.4	16.6	11.3	13.6
Maryland	300.6	189.1	52.4	35.8	21.4	16.6	15.0	10.3	8.7	10.3	10.4
Mississippi	333.3	170.0	86.8	61.9	21.6	21.1	15.4	8.5	10.2	9.6	14.2
North Carolina	306.7	166.3	79.3	50.5	21.8	23.8	13.4	10.9	9.8	12.7	9.8
Oklahoma	342.5	183.2	83.9	60.3	25.8	27.9	15.7	12.2	13.5	15.2	9.5
South Carolina	288.8	154.8	75.3	53.6	20.9	20.4	15.8	9.8	8.5	11.0	14.3
Tennessee	323.2	180.4	88.0	47.7	27.9	25.2	13.3	8.7	13.4	12.3	9.7
Texas	261.4	147.4	64.4	53.2	21.5	18.3	12.6	9.3	10.3	12.5	11.0
Virginia	284.9	167.6	70.4	41.9	22.9	23.1	11.9	10.3	10.0	13.1	10.2
West Virginia	409.0	191.3	75.2	48.9	38.1	24.4	18.3	12.3	12.3	12.1	9.1
South											
U.S.	328.7	184.0	71.3	43.9	25.7	23.4	15.1	12.8	12.2	12.0	9.4

Source: U.S. Department of Commerce, Bureau of the Census.
Statistical Abstract of the United States, 1985, p. 76.

(CHART 4)

Life Expectancy and U.S. Rank, 1969-71

	Years	Rank	
Alabama	69.05	45	*
Arkansas	70.66	27	
Delaware	70.06	41	*
District of Columbia	65.74	51	*
Florida	70.66	27	
Georgia	68.54	48	*
Kentucky	70.10	39	*
Louisiana	68.76	47	*
Maryland	70.22	36	
Mississippi	68.09	49	*
North Carolina	69.21	44	*
Oklahoma	71.42	19	
South Carolina	67.96	50	*
Tennessee	70.11	38	*
Texas	70.90	23	
Virginia	70.08	40	*
West Virginia	69.48	42	*
U.S.	70.75		

* Lowest Quartile

Source: U.S. Department of Health, Education, and Welfare, National Center for Health Statistics. In Rudov, Melvin H. and Nancy Santangelo. Health Status of Minorities and Low-Income Groups, p. 49.

ISSUE: There are fewer health care facilities available to residents of the rural South. Those facilities that do exist tend to be less comprehensive. Hospital ownership patterns are rapidly shifting from the public to the private sector.

As discussed in the section entitled Availability, the ratio of hospital beds to population appears to be adequate according to national standards. However, a closer examination of the location, size, and ownership, as well as the changing nature of rural hospitals, reveals a different picture. Almost 50% of the hospitals in the South have fewer than 100 beds; and according to American Hospital Association data, the number of hospitals with fewer than 100 beds decreased 12.7% between 1974 and 1984. The

future of the rural hospital in every Southern state has been a major topic for discussion, particularly since the limits imposed through the new DRG system were enacted.

Small, rural hospitals also tend to be less comprehensive and tend to have smaller medical staffs. Skilled technicians and therapists are difficult to recruit and to keep; salaries for all personnel are not competitive with the urban hospitals.

The ownership of hospitals in the South is shifting from the hands of the public to the large corporate investors. According to data from the Federation of American Hospitals (the proprietary hospital association), nearly 40% of all Southern hospitals in 1984-85 were either owned or managed by investor-owned corporations. Investor-owned corporations have a primary obligation to their stockholders and perhaps a secondary obligation to their patients. Unprofitable services (OB, indigent care, emergency services) have a tendency to be dropped. Obligations incurred from the Hill-Burton Act are often bought out, thus relieving the hospital of any charity mandate.

(CHART 5)

Hospital Beds Per 1000 Population, 1982

Alabama	5.2
Arkansas	5.1
Delaware	3.5
District of Columbia	7.6
Florida	4.7
Georgia	4.5
Kentucky	4.3
Louisiana	4.5
Maryland	3.6
Mississippi	5.4
North Carolina	4.1
Oklahoma	4.4

South Carolina	3.8
Tennessee	5.6
Texas	4.3
Virginia	4.1
West Virginia	5.4
U.S.	4.4

Source: American Hospital Association.

(CHART 6)

Community Hospital Beds and Ownership, 1984

	Total	<100 Beds	Non-Govt	Investor	State/Local
Alabama	130	65	43	34	53
Arkansas	92	54	39	15	38
Delaware	8	2	8	0	0
District of Columbia	12	1	11	0	1
Florida	219	56	88	81	50
Georgia	162	78	29	33	100
Kentucky	108	58	64	19	25
Louisiana	140	75	32	38	70
Maryland	55	6	49	4	2
Mississippi	109	66	25	10	74
North Carolina	130	49	95	15	20
Oklahoma	118	79	42	11	65
South Carolina	72	29	29	14	29
Tennessee	144	64	51	53	40
Texas	492	300	165	152	175
Virginia	100	25	75	19	6
West Virginia	65	33	35	13	17
South	2156	1040	880 48.2%	511	765 23.7%
U.S.	5759	2610	3351 45.3%	786	1622 13.6%

Source: American Hospital Association. Hospital Statistics, 1985 edition.

The 1985 Directory of Investor-Owned Hospitals and Hospital Management Companies, however, reports that there are 714 Investor-Owned hospitals in the South and 135 Non-Profit Hospitals being managed by For-Profit management companies. That represents almost 40 percent of all hospitals in the South (or a 39.7% increase in investor ownership over the data reported in Hospital Statistics).

Source: FAH Review, Inc. 1985 Directory of Investor-Owned Hospitals and Hospital Management Companies, p. 13.

ISSUE: Many health care services that are currently being provided through federal or state supported initiatives are in jeopardy of being reduced or eliminated.

Many of the activities of state health departments in the

South have been traditionally funded by the federal government; in several cases, greater than 50% of the state health budget came from federal sources. However, the current philosophy is to return all responsibility to the states: programmatic and financial. The end result is the abandoning of numerous activities: teenage pregnancy prevention, nutrition programs, direct medical services, specialty clinics, and health promotion. When faced with substantial budget cuts, state officials maintain "hard" programs such as sanitation and vital events registration, cutting out educational and direct services.

Also, many of the direct, curative programs, such as Rural Health Initiatives and Health in Underserved Rural Areas, are being terminated. The National Health Service Corps, which was used to place loan-obligated health professions in medically-underserved areas, is constantly fighting to stay alive. These three programs, RHI, HURA, and NHSC, at one time, had the realization that some communities in the United States would have no medical care without their intervention; this philosophy has shifted totally in the other direction.

State-run programs, such as loan forgiveness for service in medically under-served areas, are also being abandoned. Much of this change can be attributed to the "physician glut" which is supposed to occur within the near future.

(CHART 7)

Expenditures and Funding Sources for Public Health Programs of State Health Agencies, 1982

	Total	Federal	State	Other	Personal Health Expenditures	Persons Served
Alabama	58,526,000	34,591,000	22,696,000	---	1,238,000	1,164,000
Arkansas	42,160,000	15,856,000	23,355,000	---	2,949,000	472,000
Delaware	25,869,000	4,379,000	20,643,000	432,000	416,000	285,000
District of Columbia	80,529,000	22,797,000	57,732,000	---	N/A	553,000
Florida	165,554,000	54,068,000	68,062,000	2,368,000	41,056,000	1,758,000
Georgia	110,828,000	51,640,000	58,179,000	279,000	730,000	1,416,000
Kentucky	163,475,000	42,334,000	88,883,000	---	32,259,000	1,323,000
Louisiana	92,446,000	41,839,000	31,306,000	9,622,000	9,679,000	1,507,000
Maryland	390,150,000	50,284,000	299,722,000	5,106,000	35,039,000	687,000
Mississippi	66,079,000	35,008,000	14,383,000	---	16,688,000	1,009,000
North Carolina	122,693,000	52,795,000	51,648,000	18,250,000	N/A	2,483,000
Oklahoma	61,986,000	22,457,000	26,878,000	2,638,000	10,013,000	925,000
South Carolina	120,321,000	49,222,000	53,047,000	1,930,000	16,123,000	727,000
Tennessee	103,636,000	49,043,000	42,278,000	174,000	12,141,000	1,407,000
Texas	211,045,000	86,256,000	109,918,000	12,166,000	2,706,000	8,967,000
Virginia	141,644,000	37,427,000	58,016,000	3,897,000	42,304,000	1,293,000
West Virginia	111,729,000	20,982,000	87,312,000	1,235,000	2,199,000	692,000

Source: Association of State and Territorial Health Officials. In Source Book of Health Insurance Data, 1984-1985, p. 37.

ISSUE: There are fewer physicians available to residents of the rural South than elsewhere in the country. The physicians who do practice in the South tend to practice in the metropolitan areas while much of the population lives in non-metropolitan areas.

Federal and state initiatives directed at improving the health manpower supply did work. The total numbers of physicians did increase nationally, in the South, and in rural areas. However, the rural South had to show a considerable improvement before even coming close to acceptable norms. Unfortunately, and as mentioned previously, many of the programs instituted to address manpower problems have been discontinued.

(CHART 8)

Patient Care Physicians Per 100,000 Population, 1982

	#	U.S. Rank
Alabama	120	43 *
Arkansas	120	44 *
Delaware	161	20
District of Columbia	425	1
Florida	165	16
Georgia	135	36
Kentucky	129	39 *
Louisiana	145	29
Maryland	233	4
Mississippi	105	51 *
North Carolina	140	32
Oklahoma	119	46 *
South Carolina	125	41 *
Tennessee	149	26
Texas	138	34
Virginia	165	17
West Virginia	130	38 *
U.S.	169	

* Lowest Quartile

Source: American Medical Association. Physician Characteristics and Distribution in the U.S., 1983 Edition.

As an example, which is typical of rural areas, Eastern North Carolina in 1979 had not yet reached the ratio of physicians to

population that it had possessed in 1906 (1979=1:1403; 1906=1:1378; 1988=1147). Also, in 1912 in Eastern North Carolina, there were physicians located in 151 towns throughout the region; by 1970, this number had been reduced to 70. (It is now 85 communities with 9 of those communities staffed solely by federally-funded, NHSC physicians.) This can also be seen by the distribution of physicians in metropolitan areas of the South, as compared with the distribution of the population.

(CHART 9)

Percent of Physicians Practicing in Metropolitan Areas and Percent of Population Residing in Metropolitan Areas

	1982 MD's	1983 Popul
Alabama	81.3%	63.4%
Arkansas	59.3%	38.8%
Delaware	90.3%	66.7%
District of Columbia	100.0%	100.0%
Florida	90.6%	91.0%
Georgia	77.2%	63.0%
Kentucky	59.5%	45.2%
Louisiana	85.4%	38.8%
Maryland	93.5%	93.0%
Mississippi	59.0%	28.9%
North Carolina	69.5%	54.7%
Oklahoma	33.1%	57.6%
South Carolina	70.6%	59.9%
Tennessee	88.8%	64.8%
Texas	91.5%	80.1%
Virginia	74.5%	70.7%
West Virginia	46.3%	36.3%
South	80.8%	76.0%
U.S.	86.8%	68.8%

Sources: American Medical Association. Physician Characteristics and Distribution in the U.S., 1983.
U.S. Department of Commerce, Bureau of the Census. Statistical Abstract of the United States, 1985.

The type of physician has also changed. In 1921 in Eastern North Carolina, 85% of the physicians were general practitioners; in 1988, only 21% were in family or general practice, down from 27% in 1979.

Numerous other differentials exist between urban and rural practitioners. There have been several studies on factors associated with physicians deciding on rural practices; however, there are more positive inducements associated with urban practice.

(CHART 10)

Distribution of Physician Specialists, n.d.

	Metro	Non-Metro
Office-Based Medical Specialties	89.7	10.3
Office-Based Surgical Specialties	86.1	13.9
Office-Based Other Specialties	89.5	10.5

Source: Rudov, Melvin H. and Nancy Santangelo. Health Status of Minorities and Low-Income Groups, p. 26.

(CHART 11)

Number of Physician Contacts Per Person Per Year, 1982

	Total	All SMSA	Outside SMSA	South
All Places	5.2	5.4	4.7	4.9
Telephone	0.7	0.8	0.6	0.7
Office	3.0	3.0	2.9	2.9
Hospital	0.7	0.8	0.6	0.7
Other	0.7	0.7	0.6	0.6

Source: U.S. Department of Health and Human Services, National Center for Health Statistics. Current Estimates from the National Health Interview Survey: United States, 1982, pp. 109-110.

(CHART 12)

Physician Net Income Before Taxes, 1984

All Physicians	$108,400
Nonmetropolitan	$90,900
GP/FP	$71,100

(CHART 13)

Physician Professional Hours Per Week, 1984

All Physicians	56.8
Nonmetropolitan	59.9
GP/FP	58.0

(CHART 14)

Total Patient Visits Per Week, 1984

All Physicians	119.4
Nonmetropolitan	143.8
GP/FP	143.1

Source: Reynolds, Roger A. and Daniel J. Duann, editors. 1985 Socioeconomic Characteristics of Medical Practice. Chicago: American Medical Association, 1985.

ISSUE: The economics of health care in rural areas presents barriers to many residents.

Residents of the rural South have more difficulty than their counterparts in urban areas and other regions. Except in several isolated cases, cash payment is expected for medical services rendered. Rural Southerners are more likely not to have medical insurance and are more likely to have physicians who do not participate in the Medicaid program.

Also, many rural Southerners have so much pride that they will deny themselves health care rather than to ask for charity or to receive assistance through Medicaid. And with agriculture still being the mainstay of the Southern rural economy, there are

more and more persons who could use the assistance.

(CHART 15)

Source of Payment for Medical Care, 1977

	Total	South	Nonmetro	Metro
Family	44.7	50.4	48.4	43.5
Private Insurance	21.6	19.5	20.3	22.0
Medicare	6.9	6.9	7.0	6.9
Medicaid	6.5	3.7	5.3	7.0
Other	20.3	19.6	19.0	20.7

Source: U.S. Department of Health and Human Services, National Center for Health Services Research and Health Care Technology Assessment. "National Health Care Expenditures Study. Data Preview 22."

(CHART 16)

Medicare Enrollees and Medicaid Recipients, 1983

	Medicare	Medicaid
Alabama	516,000	311,300
Arkansas	360,000	190,300
Delaware	72,000	45,600
District of Columbia	78,000	117,700
Florida	1,883,000	555,200
Georgia	626,000	441,100
Kentucky	483,000	388,000
Louisiana	459,000	378,000
Maryland	457,000	328,000
Mississippi	337,000	290,500
North Carolina	735,000	349,100
Oklahoma	412,000	232,500
South Carolina	359,000	236,200
Tennessee	609,000	341,200
Texas	1,540,000	680,100
Virginia	604,000	306,400
West Virginia	285,000	177,400
South	9,815,000	5,368,600
U.S.	29,406,000	21,494,200

Source: U.S. Department of Health and Human Services, Health Care Financing Administration. In Source Book of Health Insurance Data, 1984-1985, p. 35.

(CHART 17)

Percent of Persons in Poverty Receiving Medicaid and Percent of Physicians Participating in Medicaid

Col 1: Ratio of Medicaid Recipients to Persons < Poverty Level, FY 80
Col 2: % Physicians Participating in Medicaid, 1982

	1	2
Alabama	75.0%	57.1%
Arkansas	36.0%	71.3%
Delaware	57.0%	N/A
District of Columbia	69.0%	78.2%
Florida	28.0%	16.4%
Georgia	34.0%	50.6%
Kentucky	47.0%	57.3%
Louisiana	40.0%	N/A
Maryland	69.0%	64.6%
Mississippi	40.0%	N/A
North Carolina	30.0%	40.3%
Oklahoma	41.0%	75.0%
South Carolina	50.0%	42.0%
Tennessee	36.0%	49.2%
Texas	25.0%	48.8%
Virginia	35.0%	57.4%
West Virginia	32.0%	74.4%
U.S.	54.0%	54.7%
South		46.7%

Source: U.S. Department of Health and Human Services, Health Care Financing Administration. Health Care Financing Program Statistics: The Medicare and Medicaid Data Book, 1983.

ISSUE: Several subgroups within the rural South show specific health problems needing attention.

Although generally speaking, the rural South as a whole requires attention, several subgroups which are in evident need of special attention are the rural elderly, infants/children, minorities, and migrant workers.

As the nation is aging at a greater rate than ever before, this is also especially true of the rural South. There is one large difference between the rural South and the rest of the

country: the elderly who live in the rural South have fewer social, medical, and community support systems than their urban counterparts. The problems of the rural South are compounded when you are old.

Some of the health problems of infants/children in the rural South are revealed by examining the infant mortality and low birthweight statistics. These show not only the extent of the problem but also the differences which exist between black and white outcomes. An even more revealing and relevant examination would be a county-by-county analysis.

Of particular concern is the "back-sliding" which may begin to occur as programs directed at mothers and infants are curtailed. Some of this is beginning to be seen; at the very least, the rates of decline in mortality have slowed significantly.

(CHART 18)

Infant Mortality Rates, 1979-81

	Total	White	Black
Alabama	14.2	11.1	19.9
Arkansas	12.7	10.5	19.3
Delaware	14.8	10.9	27.4
District of Columbia	24.1	13.7	26.3
Florida	14.2	11.5	22.4
Georgia	14.4	10.9	20.8
Kentucky	12.2	11.5	19.7
Louisiana	14.5	10.9	20.6
Maryland	13.7	11.2	20.0
Mississippi	16.7	11.1	22.7
North Carolina	14.3	11.3	21.1
Oklahoma	12.3	11.8	19.6
South Carolina	16.3	11.9	22.9
Tennessee	13.2	11.2	20.4
Texas	12.2	11.1	19.3
Virginia	13.5	11.7	20.0
West Virginia	12.9	12.5	23.2

U.S.	12.5	11.0	21.0

Source: U.S. Department of Health and Human Services, Public Health Service. Health: United States, 1984, pp. 55-56.

Infants Weighing < 2500 gms, 1979-81

	Total	White	Black
Alabama	7.9	5.7	11.9
Arkansas	7.4	5.8	12.1
Delaware	7.7	5.6	14.5
District of Columbia	12.9	6.0	14.3
Florida	7.6	6.0	12.1
Georgia	8.6	6.2	12.6
Kentucky	6.9	6.4	11.9
Louisiana	8.6	6.0	12.7
Maryland	7.9	5.9	12.4
Mississippi	8.7	5.7	11.9
North Carolina	8.0	6.1	12.3
Oklahoma	6.6	6.1	11.8
South Carolina	8.8	6.1	12.3
Tennessee	8.0	6.4	13.3
Texas	7.0	6.0	12.6
Virginia	7.4	5.9	12.0
West Virginia	6.8	6.6	12.4
U.S.	6.9	5.7	12.5

Source: U.S. Department of Health and Human Services, Public Health Service. Health: United States, 1984, pp. 79-80.

Although not statistically presented beyond the infant mortality and low birth weight data, the differences between racial subgroups in health status, mortality, and morbidity are most evident.

Senator SANFORD. Let me just ask you a couple of questions, Mr. Shepherd. How much does the CHAP program cost, and where does the funding come from?

Mr. SHEPHERD. With CHAP existing community resources absorb the costs that would have to be incurred. We look for sponsors, like the health department, the hospital or mental health center. And they agree to accept this activity in the part of their normal function.

Therefore, there is virtually no cost locally. We will normally involve thirty to thirty-five volunteers to be in the training itself, people—physicians, nurses, other professionals, who give up their time in the evening to come out and teach the advocates. They're doing this voluntarily.

So the only cost involved is the cost that we have in terms of supportive services within the School of Medicine. And that's where the funding currently comes from, and probably doesn't amount to more than about $50,000 per year.

Senator SANFORD. Per county?

Mr. SHEPHERD. No; for the entire program.

Senator SANFORD. Do you have any trouble getting these various agencies to cooperate, or do they see this as some kind of an intrusion?

Mr. SHEPHERD. Like I said, it's a front door approach; therefore, the initial thing that is done is to go out and identify every person who has a stake in health and human services in a community.

In Pitt County, where we're currently developing an advocacy program, our sponsorships include the Mental Health Center, the Health Department, Agricultural Extension Service, Pitt County Medical Society, the Schools of Nursing, Medicine and Allied Health.

You begin by establishing an extremely broad base. There are no threats because a lot of these agencies, because of cutbacks in programs, don't have people in the communities any more. They have to wait for someone to formally present themselves to the front door for a service. So they're seeing the advocates as their agents, if you please, in the community.

Senator SANFORD. What kind of a person do you try to get as an advocate?

Mr. SHEPHERD. We have advocates ranging in age from middle twenties, into the eighties. We have trained at all levels, from individuals who cannot read to an individual with a doctorate. They're black, they're white, they're rich, they're poor, they're male, they're female. They represent a cross-section. It's not a program directed at poor folks. It's a program developed for people.

And I think this is also one of the things that's helped ensure its success. We've seen areas where we've gone into rural North Carolina where there have been very, very strongly segregated institutional settings. We've found that barriers have broken down, not because of anything that we've done directly, but because of the involvement. Because it is a strong people-based program, these barriers, these segregated institutions are now opening their doors.

Senator SANFORD. Now, you're using the advocates to help utilize the health facilities that are available?

Mr. SHEPHERD. Right.

Senator SANFORD. Not really adding any health facilities as such.

Mr. SHEPHERD. No.

Senator SANFORD. Well, what are they finding that they need, or what do they lack, or what is it that they ought to have that they don't have to make certain that health care ultimately is better distributed and delivered?

Mr. SHEPHERD. I think some of the problems that we've discussed here today are some of the same problems confronting the advocates. But there are some problems that we haven't discussed. Rural transportation is a challenge that I think will be with us for several more generations. I don't think there is a easy solution to transportation. Advocates are providing transportation.

I think once an advocate has identified an individual needing service, there is a problem in getting the individual qualified for that service. Identifying services are needed, but they don't exist at the local level.

Senator SANFORD. Now, how does this relate to the stated need for more preventive health care?

Mr. SHEPHERD. This is our first line of preventive care. We have a person who can take the goals and objectives that we have, in terms of health care delivery, and put it in a locally understood form.

If you've got a neighbor talking to you and encouraging you to change your behavior patterns, it's probably more likely that you're going to do that than if you have someone in a white coat sitting behind a desk telling you, because you also have someone back home who's going to be there to watch you if you slip.

You'd be absolutely amazed by the number of walking clubs that have developed in rural eastern North Carolina as a direct result of this. The advocates are very pro-active. They're out there identifying people in need and getting them into preventive services.

Senator SANFORD. Well, thank you very much.

Mr. SHEPHERD. Thank you, sir.

Senator SANFORD. I think that whole concept is of great interest, and I'm glad we can bring it to forefront attention. I hope we can bring it to the attention of a wider audience.

Well, let me turn back, now, to the State of North Carolina, and what we're doing, and ask Mr. Bernstein a few questions.

I was particularly shocked at the sudden decline of the National Health Service Corps. And I assume that that has to be typical across the country.

Mr. BERNSTEIN. Yes; that is the program for the next few years. And this State has, by far, the best infrastructure to cope on its own in terms of recruiting that the State has funded. And I think it's going to be very difficult for us to keep physicians in all of our counties.

But I hate to think of what it's going to be like in some of our neighboring States.

Senator SANFORD. I think you've got that in your oral discussion although it didn't come quite where you put it. But I think that relationship of how many people from the National Service Corps that we have, in relation to the State positions recruited under some other program has not diminished, I take it?

Mr. BERNSTEIN. No; we're just recruiting privately, basically for those others. We have to try to fill the gap by increasing that to fill the loss of the Corps.

Senator SANFORD. Well, you've dropped to nine this year.

Mr. BERNSTEIN. Yes.

Senator SANFORD. But you had over fifty, all told?

Mr. BERNSTEIN. Right.

Senator SANFORD. So the National Health Service Corps is simply not playing much of a role anymore.

Mr. BERNSTEIN. That's true, it's not playing much of a role anymore.

Senator SANFORD. And we're also, then, losing about a third of the total physician placement because of that.

Mr. BERNSTEIN. That's true.

Senator SANFORD. The State is doing a relatively good job holding up, but the decline in the Federal simply means it's not being done.

Now, you might, to the extent that you know, elaborate a little bit on your view of what's happening with the National Health Service Corps, because their contention is that they haven't cut back as much as they've reorganized and redirected. What do they mean when they send up that alibi?

Mr. BERNSTEIN. It is confusing to figure it. I have a difficult time, also. But to give you a feel for the National Health Service Corps, in 1985, they put out approximately sixteen hundred scholarship physicians. These are the physicians that we see in Duplin County, in Dr. McCaleb's practice, et cetera.

In 1990, they're predicting they'll have fifty at the low and seventy-five at the high for the country. And they're going to add to that, with their new program, which are not scholarship people, these are recruited volunteers. They hope to recruit three hundred. So that would give them three hundred and fifty.

They have a repayment program, which they'd like to build up. Their main thrust is to offer to buy off private loans of physicians. So if you practice with Dr. McCaleb, we'll pay up to $20 thousand of your loan per year, as long as you sign up for more than 2 years.

The problem with that program is that it is only funded at $2.9 million for the country, and it goes down next year to $2.2 million, as I understand it.

And the structure, and I don't understand this, but it might be something to look into, is that when they make a commitment to a doctor to practice in Northampton County, they not only have to pay off the loan for this year, but they have to obligate all of the years in the future that that person says he or she will take.

So if it's $20 thousand this year, and then $20 thousand for the next 3 years, so it's $80 thousand, then you have to pull the $80 thousand of the $2.2 million this year.

Now, I don't understand that, but that's how the government has set up. This drastically limits the number of physicians that they can put into this program.

For the entire country, forty-eight physicians will be put into the program next year.

Senator SANFORD. Now, how are they going about recruiting the three hundred?

Mr. BERNSTEIN. We're going to compete against ourself.

Senator SANFORD. Do they have any incentives in that, or just recruit?

Mr. BERNSTEIN. They recruit, but their incentives—it gets a little complicated. Most of their recruits are for the 330 Federal Community Health Centers.

They have transferred funds in to pay the salaries in those programs. So they can recruit and they have the salary money. They don't have an additional incentive beyond the salary, to recruit.

Senator SANFORD. But they go mostly to these centers where you're taking care of the poorest people.

Mr. BERNSTEIN. Right.

Senator SANFORD. And that doesn't do a whole lot for the overall rural program.

Mr. BERNSTEIN. Right. It doesn't do a whole lot for the rest. I do not know if they'll be successful in recruiting physicians to go to the migrant programs without additional incentives.

Senator SANFORD. Well, I think that's something to which we should pay a great deal of attention, because the contention in Washington is that we're just changing the style, not changing the effect. And obviously, it's having a drastic effect.

Mr. BERNSTEIN. That's our impression.

Senator SANFORD. And already has.

Mr. BERNSTEIN. And already has.

Senator SANFORD. Well, we might want to come back to you with another questionnaire—another question or two on that when we develop this a little more fully.

Now, I'm going to ask you the embarrassing question, since it's been brought up by one of our other panel members. You've got a reputation all over this State and in Washington for doing one of the outstanding jobs in the country.

And I want you to comment on the earlier comments about South Carolina.

Mr. BERNSTEIN. To tell you the truth, I don't know a lot about it. Our rural health centers are not part of the public health department. They are community-owned centers that have physicians and that provide family medicine to rural citizens.

The public health program in this State is a separate governmental program. I think what Dr. Lawler is referring to is the fact that North Carolina is a decentralized State. Each county, with some exceptions, runs its own little health department.

Tennessee, I think Virginia, and South Carolina, for instance, have a centralized State program in which they have regions. So they're spreading their resources among bigger entities. They can share physical therapists in regions. And I think that's the crux of what she was talking about.

Senator SANFORD. Well, we have county and sometimes multicounty health departments. They get funds from the county and funds from the State. Who supervises that money from the—at the State level?

Mr. BERNSTEIN. There is a Division of Health Services that supervises the money. But in North Carolina, we have very few health departments that are more than one county. And basically, the staff and the direction comes from the county, not from the State.

Senator SANFORD. Now, what about block grant money coming into the State that apparently, in South Carolina, goes to these county, I mean, these local service——

Mr. BERNSTEIN. It's divided——

Senator SANFORD. How is that handled in this State?

Mr. BERNSTEIN. It's divided up between the eighty-four separate departments.

Senator SANFORD. The real question is that we are spread out almost too much.

Dr. LAWLER. Yes.

Mr. BERNSTEIN. [Nods head.]

Senator SANFORD. Very good. Well, that's not something that can be corrected at the Federal level.

Mr. BERNSTEIN. Right. It's a State issue.

Senator SANFORD. Well, now, I have so many other questions coming out of this. Not really, because the testimony has been very thorough, and your prepared testimony, very thorough. It's been a tremendous program. The five of you have—six of you have brought together here so many good ideas, and focused on so many problems.

I'd like to give those in the audience an opportunity to make a brief comment, or ask a question or add a suggestion. I think if you just stand in place, if you care to, you can be heard.

Mr. FEARING. I'm Keith Fearing. I'm a retired pharmacist from Manteo, North Carolina.

Senator SANFORD. And a legislator of many years.

Mr. FEARING. The question that I have is are you identifying areas where certain diseases are more prevalent? I know one county not far from here where there's a lot of hypertension and diabetes, which bring on heart conditions. Is there an attempt to identify areas such as this through these programs?

Mr. SHEPHERD. It's good to see you again, after several years. At this stage we have developed a pilot project in Hertford County. That's the only county into which we asked to go.

From that point on, we're responding to individual requests from communities and counties to participate in an advocacy development project. So we're trying in forums, such as this, to get the message out, and then making ourselves available to help the local community develop their own advocacy program.

We are not really doing the selection process itself. As you said, it is a nearby county that has very bad indicators of health care. They could contact us, and we'd be most happy to work with them to develop this type of system.

Mr. FEARING. I'm going to add, it's not Dare County that I'm referring to. That's a healthy county. My grandfather practiced there. He died before I was born.

Mr. SHEPHERD. Right.

Mr. FEARING. I saw a letter that he wrote to a brother of his. And he said Dare County was a very lovely place to live, but there are not many sick people there.

Mr. SANFORD. Anyone else care to make a comment?

Ms. OFFERMAN. Senator Sanford, I'm Muriel Offerman, and I'm a businesswoman from Wallace in Duplin County, and an active Democrat; therefore, very interested in rural health care.

I was approached by Plainview Health Center that is served by physicians on the National Federal Health Corps. Last summer I went through a process of trying to prevent Plainview from being merged with Goshen in Faison.

Question. Are we having or are we not having a problem in keeping the physicians down on the farm? Are those physicians recruited by the Federal Health Service—the Federal Health Corps—or a twofold question.

One. Is it common for that physician to have to sign a contract saying that after his time of 2 years is over, that he or she will not practice within a 20-mile radius. Or is that also left up to the local boards to make that contract?

Dr. McCaleb. I don't know that. Our group doesn't have a restrictive covenant. But I can only speak for our group. I don't know.

Ms. Offerman. That might be a problem that we're experiencing in Duplin County, in keeping our physicians who are leaving.

Mr. Bernstein. May I comment? I've never heard of that restriction. I'd be glad to try to find out for you.

I guess I shouldn't venture into this, but I might comment on that particular situation, though, from what I understand. I think it's important to look at the longer term, rather than the short term. I firmly believe that the small, tiny unit health centers are going to have almost an impossible task of surviving the next 10 years.

There are pros and cons of size and combining things, and I understand that. But in the long term, the small centers are going to have either to band together or affiliate with hospitals or larger institutions in order to survive.

And I think that is one of the issues in Duplin County right now.

Senator Sanford. Any other questions? Yes, sir.

Mr. House. Lonnie House, Bertie County Health Department. There are a hundred counties. There is a health department in each county. I do have a question, though, concerning the family planning money that we receive from the Federal government.

Last year, it was cut by 2½ percent to the State. It is our anticipation it will be cut 2½ percent again this upcoming year, and maybe another 20 percent the following year.

And we're very concerned about the effects that that will have on the delivery of public health care and prevention to some of our rural clients.

Senator Sanford. I can't answer that about the future, except that I would dare say that after the November elections, the priorities of health care are going to be somewhat different.

We want to make certain that they are somewhat different in a more constructive way than they have been in recent years. There has been far too little concern about these kinds of programs.

It is so difficult to be an advocate of those programs. We identified twenty-one items in the budget that related to people with special needs because of poverty, living in areas away from the center of things, rural areas. And there really are more than that. All of those programs were being shortchanged in order to make it appear that the education budget, for the first time in 8 years, was being increased.

We couldn't take the position to decrease the education program. But we certainly need to keep these things in balance. And as I said in the beginning, it's a question of setting priorities.

And I simply think we've neglected these relatively small-cost programs. We've cut them because there's no strong constituency out there demanding that we not cut them. We must end this neglect and that's what I'm trying to do now, by gathering in all of these things and saying we can't keep whittling away at it.

I didn't mean to be political in saying that after the election, because regardless of how that election comes out, I'm satisfied we're going to have a different approach to the budget.

It's going to be a budget that's a little bit less balanced the way it is now. And I certainly don't mean to be suggesting that one party or another will do it. I hope both parties would have that attitude. I get that feeling in the Senate as I listen around. So many people now are aware of the fact that these vital programs have been cut.

I think it was remarkable that Medicare wasn't cut in the 1989 budget proposal. So you know, we're beginning to firm up the support that says there's a certain part of America that can't be neglected, if it's going to be America.

We've always cared for people that needed our help.

Thank you. Let me just give you one more shot, those of you that were on the panel.

Mr. FRENCH. My name is Sidney French from Craven County. I just wanted to make one comment pertaining to our local health departments. I was under the assumption myself, from the information we receive in Craven County that the State did have most of the influence in deciding what the health departments could and couldn't do.

And the biggest emphasis that we have, as Commissioners, was cutting money. I would like to know just a little bit more about where we stand on that.

Dr. LAWLER. I would like to respond, Senator Sanford, if I may.

Senator SANFORD. Yes, please stand up.

Dr. LAWLER. And I'm sure that Jim Bernstein can add to this.

As Mr. Bernstein said, it's a highly decentralized health department system in North Carolina, and there's a great deal of local autonomy. For instance, salaries are set at the local level. There is no standardization for salaries according to health care providers. In nursing, as an example, there is a growing disparity between nursing salaries in the hospital setting and the health department setting. And since nurses are pivotal to the delivery of public health services, we're going to start to see a loss of nursing personnel within the health department.

The State sets standards for the health departments, but actually in many instances, the health departments can choose to have their own program criteria and standards. It's a question of choice as to whether State guidelines are, indeed, adhered to.

And perhaps more regionalization, and more of a centralized administration for the delivery of public health services in this State would add to the quality, and certainly the efficiency of the programs.

Mr. FRENCH. Thank you.

Senator SANFORD. Well, thank you very much. I think we'll have to bring this hearing to a close after one more question.

Mr. MONROE. Thank you. My name is Tim Monroe. I have the position as the Pitt County Health Director. With regard to the comparison between the North Carolina system and the South Carolina system, I did work as local health director in the South Carolina system for 2 years, and have been in North Carolina for nearly that long, now.

I think there are some benefits to the South Carolina system, but it also has some significant drawbacks. When I came back to North Carolina, I had some concerns about the local autonomy, but quite honestly, I found it to be a strength instead of a weakness.

I think that the important thing is that public health is community health. And public health has to be recognized and there has to be a sense of ownership at the community level.

When the State administers a program exclusively, as in the South Carolina system, that's often lost. And I think that's a great—the great weakness there. I believe that North Carolina has struck a very good balance in the way we administer public health.

I would suggest approaching a move to too much centralization very cautiously. Thank you.

Senator SANFORD. Could they stand a little more money?

Mr. MONROE. Certainly. But I think there is a very good partnership.

Senator SANFORD. Let me ask one more question, if I may, to Mr. Bernstein. I asked this question of the first panel.

If the Federal Government were to have more funds to invest in rural health care, what would you recommend that we do?

Mr. BERNSTEIN. Probably stick to my National Health Service Corps theme, and that would be the first place I would put the funding, targeted for the most needy areas.

Senator SANFORD. Well, I want to thank all of you again for being here today. Certainly, this has been very interesting testimony, and it's on a very important issue, and part of an even more important larger issue.

I will share this with my colleagues on the Budget Committee and my other colleagues on other committees in the Senate. Almost every health care bill includes rural aspects, and so many other pieces of legislation have rural aspects, that we need to be vigilant in promoting.

I want to assure you that I intend to do all I can to see that rural areas are treated fairly, that I will do all I can to see that rural health care is promoted and supported to a greater extent than it has been.

I think this kind of citizens' support and interest will be extremely helpful as we try to develop the kind of support that's needed in any legislative body to get things through and to get money appropriated and to get attitudes changed.

And it's been very, very helpful. Now I will take this Budget Committee gavel and pound this to a conclusion with my thanks to all of you.

[Whereupon, at 12:10 p.m., the hearing was adjourned.]

STATEMENT PREPARED FOR THE RECORD

UNITED STATES SENATE BUDGET COMMITTEE
HEARING ON RURAL HEALTH CARE

GREENVILLE, NORTH CAROLINA
MAY 2, 1988

BY: EUGENE S. MAYER, M.D., M.P.H
ASSOCIATE DEAN
DIRECTOR, NORTH CAROLINA AHEC PROGRAM
PROFESSOR OF FAMILY MEDICINE AND MEDICINE
UNC-CH SCHOOL OF MEDICINE
CHAPEL HILL, NORTH CAROLINA

REPRESENTING: THE NORTH CAROLINA AREA HEALTH EDUCATION CENTERS (AHEC) PROGRAM

I would like to thank Senator Sanford and the Senate Budget Committee for the opportunity to reinforce the importance of focusing on the special health care needs of rural america. Testimony by (Dr. McCaleb and Mr. Harrell) others before this committee has quite eloquently described and identified the significant health care and manpower issues facing citizens of North Carolina, the rural practitioner, and the small rural hospital. The testimonies by Mr. Bernstein of the N. C. Office of Health Resources Development, and Mr. Shepherd, of the East Carolina University School of Medicine, have not just focused on problems of manpower, access, and delivery of health care services in rural areas, they have also described significant state initiatives in the recruitment of physician manpower, the establishment and maintenance of rural community health care centers, and the extraordinary Community Health Advocacy Program. We are proud that many of North Carolina's efforts are widely copied as national models.

In fact, North Carolina is extremely rich in examples of cooperative and collaborative efforts to address rural health issues which have and will provide significant models of intervention for the rest of the county. For example, in the early 1970's, fully 46% of the state's 100 counties were showing a loss of physicians relative to population, and only 28% were showing an improvement. This situation created concerns throughout the state and led to the development of several initiatives that received various combination of federal, state, and local support. These initiatives included:

1. The Office of Rural Health Services (now the Office of Health Resources Development, directed by Mr. Bernstein).
2. The National Health Service Corps and Community Health Centers.
3. The training of physicians assistants and family practitioners
4. The development of family medicine departments and family practice residency programs.
5. Minority medical student recruitment.
6. Expansion of medical school enrollment at UNC, Duke, and Bowman Gray, and the development of a new school of medicine at East Carolina University; and
7. The North Carolina AHEC program.

Each of these programs has had a positive contribution to make to health manpower distribution and access to health care services in North Carolina. Most importantly, their impact has been made more significant by the fact that there has been significant coordination of effort between the programs.

We are now faced with new and stubborn problems in rural health care such as the plight of the small rural hospitals, the shortage of nurses and allied health personnel, and increasing awareness of supply problems in primary care and continuing

problems of geographical distribution, retention, and the quality of health care services. As Director of the North Carolina AHEC Program, a program which acts as an organizational bridge between educational institutions and the community, I would like to emphasize the major role which AHEC and the academic health science centers and the major community hospitals have played and will play in future solutions to these problems.

Internally the activities of the academic institutions in training, admission policies, and curriculum design has always been and will continue to be of great importance to health manpower development. In a broader sense, however, the future of well trained health manpower for rural areas depends upon the linkage of the educational process and the expertise of the academic health science centers with the rural community. The rural impact of this linkage which is facilitated by the AHEC Program was highlighted in a recent issue of the AHEC Bulletin (V: 2, Winter 1987-1988)) which focused on Rural issues. In that issue Margretta M. Styles, President of the American Nurses' Association, notes that "while the AHEC model is academically based, it is not ensconced in an ivory tower". She also observes that

> The multidisciplinary outreach of AHECs has proven to be a most effective method to meet the challenges posed by AIDS, the problems of aging, drug and child abuse, adolescent pregnancy, and mental illness.

The AHEC Bulletin also includes a statement by Robert T. Van Hook, Executive Director of the National Rural Health Association, who maintains that "The AHEC mission to improve physician distribution has never been more important." In his analysis of the plight of the rural hospital he concludes that

> AHECs provide important linkages between rural hospitals, providers and the community. The "AHEC bridge" has become critical in many states, as the need to work more cooperatively than ever before becomes clear. Shared resources, strategic planning and technical assistance are important AHEC assets for rural hospitals.

Finally, in the same issue of the AHEC Bulletin, James E. Davis, M.D., from Durham, North Carolina and President-Elect of the American Medical Association notes the "parallels between the AHEC program and relevant recommendations of the AMA sponsored Health Policy Agenda (HPA)", a consensus document of participants from 172 organizations representing all participants in the health sector. Dr. Davis cites the "impressive record of the AHECs" in the areas of health professions education, geographical distribution of health professionals, health care for the

uninsured, consumer education, health promotion, and disease prevention. "The similarity between several recommendations and the goals of the AHEC programs provides a renewed opportunity to set the AHEC Program within the context of a national health policy consensus, and as such, to continue to exert a positive influence on our health care system."

National AHEC Program

We in North Carolina are proud to have been associated with the national Area Health Education Centers program. It is not only effective in addressing rural health care issues it is also an excellent example of the way in which a modest federal investment can stimulate additional initiatives and funding at the state and local level. This year, for example, the state of North Carolina has appropriated $28 million for AHEC activities. Nationally, we estimate that over $100 million from state and local sources augments the federal AHEC appropriation of $18 million. This is a good return on investment for the federal government.

The national AHEC Program, initiated in 1972 under section 774(a) of the Public Health Service Act as amended by P.L. 92-157 and re-authorized in 1976 by Section 781 and Section 802 of P.L. 94-484, is part of a national effort to improve access to health services through changes in the education and training of health professionals. The national AHEC Program, which has now established AHECs in 32 states, stimulates the formation of a balanced partnership between university-based health professions training programs (academic health science centers) and institutions in underserved communities. The partnership serves to link the academic resources of the health science centers to community hospitals and other local institutions, thereby addressing the need for health professionals in underserved communities.

The goals of the program are to:

** improve the geographic and specialty distribution of health care professionals in rural and urban underserved areas;

** improve the retention of health care professionals in underserved areas; and

** improve the quality, utilization and efficiency of health professionals in underserved areas.

The unique features of the AHEC concept and the national AHEC Program, include:

** The partnership between the health science center and the target area is a partnership between health professions education and the health services delivery

system. The national AHEC Program serves as a bridge between the resources and needs of the university health science center and a community of health professionals and health care institutions.

** The partnership between the university health science center and a community can be mutually beneficial. Both may be changed positively as a result of the new inter-organizational entity called an AHEC Center. The AHEC Center can facilitate the expression of local needs and the development of effective cooperative relationship with the health sciences center. Moreover, mutually agreed upon educational goals and programs will be more effective than isolated and disconnected attempts to attract, retain, and improve the quality of health care professionals.

** Coordinated multi-disciplinary education is an effective approach to the problems of supply, distribution, quality and utilization of health professionals, because it mirrors the interdependent nature of the health services delivery system. By involving both a number of health professions schools and an interdisciplinary mix of health professionals, programs will achieve more effective outcomes than could be expected from isolated endeavors.

North Carolina AHEC Program

The North Carolina Area Health Education Centers (AHEC) Program was among the first eleven federally funded Projects. I would briefly like to outline its development and accomplishments since we have often been cited as a model of the unique partnership between the university health science center and the community which can improve the geographic distribution, retention and quality of well-trained health professionals and support personnel to meet the primary medical care needs of the people of North Carolina. Since first receiving federal AHEC funds in 1972 the Program has been targeted to address the goals of the federal AHEC legislation.

Under the leadership of the Dean and the faculty of the School of Medicine at the University of North Carolina at Chapel Hill, the N.C. AHEC Program and its nine area health education centers (AHECs) have been developed in cooperation with the other UNC-CH health science schools at Chapel Hill (Dentistry, Nursing, Pharmacy and Public Health), the Duke University Medical Center, the Bowman Gray School of Medicine of Wake Forest University and the East Carolina University health science schools (Medicine, Allied Health and Social Work, and Nursing). We are especially appreciative of the support that you have given, Senator Sanford, to the development of strong AHEC ties between the Duke University Medical Center and the Fayetteville AHEC.

Also included in this statewide educational program are community hospitals, health departments, various service agencies, other university campuses, community colleges, technical institutes and practicing professionals and support personnel.

In North Carolina, each AHEC is based in a community hospital or in an incorporated non-profit foundation. The governing Boards of Directors of these AHECs agree to accept the responsibility for health manpower development programs in a multi-county area. These programs span the continuum of education for a variety of health professionals and support personnel in a manner which reflects both regional and statewide needs while focusing on primary care.

Nine AHECs help serve the health manpower development needs of North Carolina: (1) Mountain AHEC, (2) Northwest AHEC, (3) Charlotte AHEC, (4) Greensboro AHEC, (5) Wake AHEC, (6) Area L AHEC, (7) Eastern AHEC, (8) Fayetteville AHEC and (9) Wilmington AHEC (Figure 1). In partnership with the four university medical centers in North Carolina, this statewide network of regional centers for health manpower education and training involves:

-- the presence of full-time medical and other health science faculty and staff based at each of the nine AHECs;

-- the regular presence in the AHEC regions of visiting faculty and staff from the university health science schools and the regular presence of AHEC-based faculty at the University health science centers;

-- the voluntary support and participation of community physicians and other health professionals, administrators and support personnel from the AHEC hospitals and from throughout the AHEC regions; and

-- a network of libraries which now connects almost all community hospitals to an AHEC and in turn, to a university health science library.

Specific activities and accomplishments of the N.C. AHEC Program include:

1. The provision of educational opportunities for medical, dental, public health, pharmacy, allied health and nursing students throughout the state. **In 1986-1987, 4,998 student months of training were conducted off-campus in community hospitals and agencies. A significant part of the training of medical students at UNC-CH takes place off-campus in community settings in the AHEC regions. Over 30% of the clinical training rotations for third and fourth year UNC-CH medical**

students took place in the AHECs with the contributed teaching and supervision of community physicians. Figures 2 and 3 show where students regularly receive training in communities with AHEC's support. We are a statewide classroom.

2. The expansion of regional capabilities to train nursing public health and allied health personnel. **Since 1972 seven health science schools (nursing, public health, dentistry) within the UNC system have conducted 22 off-campus baccalaureate and masters degree programs in 13 sites throughout the state.**

3. The expansion of the regional capability to train primary care medical residents, especially in family practice. **Over 300 new primary care residency positions have been developed throughout the state, with nearly 180 in family practice.**

4. The provision of increase opportunities for continuing education, and individualized technical assistance and consultation for all health personnel. **In 1986-1987 the nine AHECs in North Carolina conducted 3,295 continuing education programs in 78 of the state's 100 counties for over 86,000 health professionals and support personnel. In addition in 1986-1987, medical faculty representing 22 medical sub-specialties conducted 2,856 consultation clinics in 49 locations in the AHEC regions. Figure 4 shows the distribution of these programs which reach into our most rural counties. Our academic health science centers are not ivory towers.**

Statewide manpower trends suggests that significant progress is being made in recruiting physicians to rural counties. North Carolina increased its supply of physicians from 1973 to 1983 at a rate substantially greater than the rest of the United States. When non-metropolitan counties (representing 60 of the most rural counties in North Carolina) are analyzed, the improvement in both supply of physicians and population/physician ratio in North Carolina is substantially greater than the rest of the U. S. for the period of 1972--1985 (see Figure 5).

These trends are most gratifying to those who have worked hard to help bring them about. The fact that, during the period 1973 to 1985, 86% of the state's counties improved their ratio of physicians-to-population is most reassuring.

Walter L. Shepherd in his testimony to the committee described the impact of the academic health science center (East Carolina University) on rural health issues in eastern North Carolina. As he noted the AHEC Program has played an integral role in the development of primary care residency programs and rural outreach in continuing education to the eastern part of the

state.

The same is true for AHECs in each part of the state. For example, in the western part of the state, the Mountain AHEC (MAHEC) in Asheville, North Carolina has had a long standing commitment to preparing family physicians for rural practice in the isolated region it serves. Since its beginning in 1978, the MAHEC Family practice residency program, affiliated with the University of North Carolina at Chapel Hill, forty-nine of the sixty-seven graduating physicians (73%) have remained in the region to practice. Over half of these practitioners have settled in towns of under 10,000 population.

Despite these accomplishments, however, there is considerable work to be done. Although the ratio of physicians to population has improved in the overwhelming majority of North Carolina counties, many counties continue to have needs.

Although there is no general agreement on the best ratio of population to physicians, a ratio of fewer than 750 people per physician is often cited as a target by experts. By this standard, 77 of North Carolina's counties are still deficient in their supply of physicians. Regarding primary care physicians, who are more likely to provide health services to rural areas, 57 North Carolina counties reported fewer than 5 physicians per 10,000 people in 1986, although the national average is 7.07 primary care physicians per 10,000 population.

The challenge to AHEC goes beyond the need to continue to recruit practitioners. The need to maintain and strengthen support system for practitioners once recruited may be a greater challenge than the initial recruitment. AHEC with its multiple systems of professionals support and its linkages between academic health science centers and the community is a national vehicle to address the retention issue.

The nursing shortage has been well documented nationally and in North Carolina. Less well publicized, are shortages of allied health personnel who are equally important to the health care of rural North Carolinians. The AHEC program recently conducted statewide manpower surveys in medical technology, medical record administration, occupational therapy, pnysical therapy, speech and hearing professions, radiologic technology and respiratory care. Vacancy rates and turnover in all disciplines were high and had increased over the previous five years. Staff size in hospitals showed either no growth or a decrease in several disciplines since 1981. These factors are particularly critical in small rural hospitals and clinics.

Finally, once "recruited and retained" any health professional in a rural or underserved areas is faced with the tremendous challenge of keeping up to date. This challenge will grow as the health care system is confronted with new technologies, new diseases, and new forms of organization and

finances. The need to bring this new information to the isolated practitioner is of critical importance for their retention and ability to provide quality health care.

AHEC projects have become established networks of communication between academic centers, hospitals, service agencies, and community practitioners. These networks allow for rapid transmission of information from the academic center to community practitioners. The fact that the Secretary of HHS has given funding priority to applications from medical schools for the development of regional AIDS education centers when the application includes linkages with AHEC, attests to the fact that the AHEC Program is perceived as a network for the dissemination of information to meet current health problems.

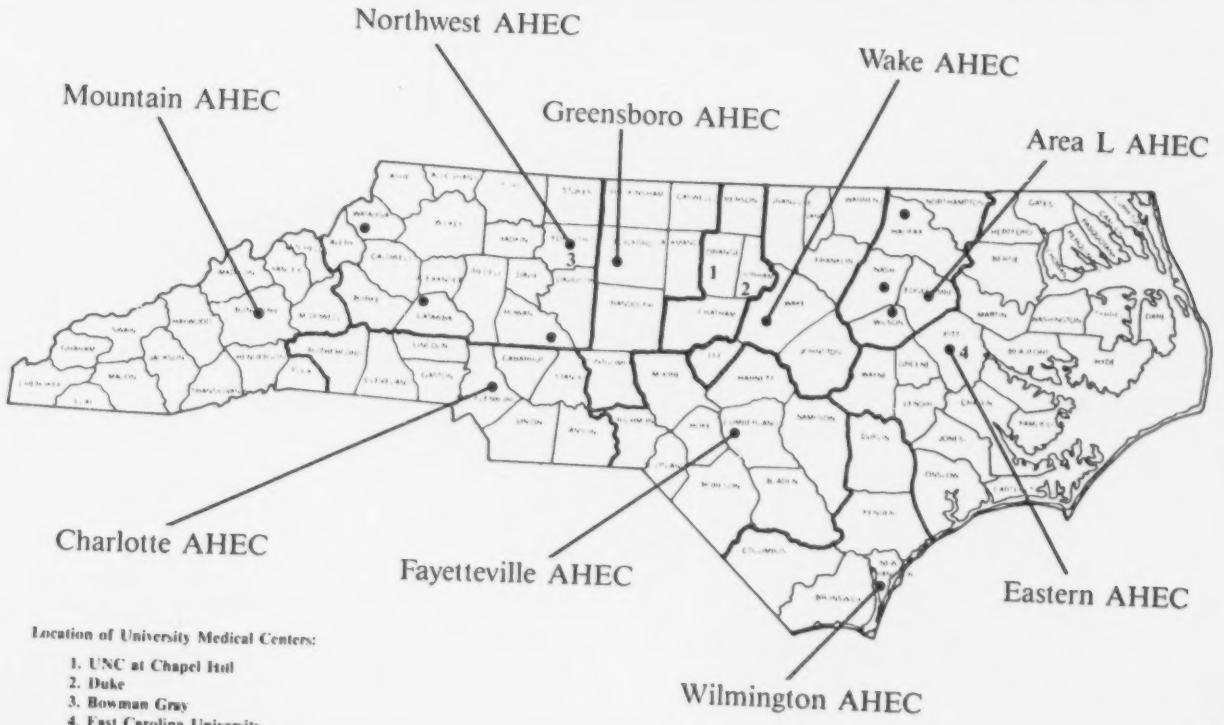
One can imagine other areas of national need that can be addressed by AHEC. North Carolina is making major efforts to link AHEC with the mental health system, to reach the community practitioner relative to child abuse, infant mortality, health promotion, and the challenges created by our aging population. In addition, the North Carolina AHEC Program has received approval for an AHEC Special Initiatives Training Grant from the federal government which will develop specialized educational support arrangements for rural community health centers, including those which are designated sites for physicians of the National Health Service Corps. This activity will be designed and developed in partnership with the state's Office of Health Resources Development and with federal officers overseeing the National Health Service Corps and Community Health Centers. There are over 80 such sites in North Carolina. These facilities are isolated geographically and professionally, have small staffs and few spare resources for manpower development; they often cannot easily participate in conventional continuing education offerings, including those provided by AHEC, because of their geographic isolation and inability to release staff from service responsibilities. These small community-based centers are also among the most vulnerable to several recent trends in the financing of health care systems, particularly changes in federal policies for support to community health centers and changing federal policy relative to health manpower distribution, including a de-emphasis of the National Health Service Corps.

Past accomplishments of the N. C. AHEC Program suggest that current challenges facing rural America can be addressed in the future by formal partnerships between the academic health centers and the community. We also believe that if AHEC did not exist our health science schools and our communities would be challenged to create something like AHEC--especially as we become more of an information society. The AHEC Program has been the subject of several national evaluations and has always received high marks. The federal government recently has issued a Request for Proposals that will result in the creation of another national AHEC evaluation, and we are excited about what we expect to be very positive findings. Some of the studies that have

Figure 1

Counties Served By The

NORTH CAROLINA AREA HEALTH EDUCATION CENTERS (AHEC) PROGRAM



Location of University Medical Centers:

1. UNC at Chapel Hill
2. Duke
3. Bowman Gray
4. East Carolina University

Figure 2

Training Sites for Students in Nursing, Dentistry, Public Health, Pharmacy, and Allied Health

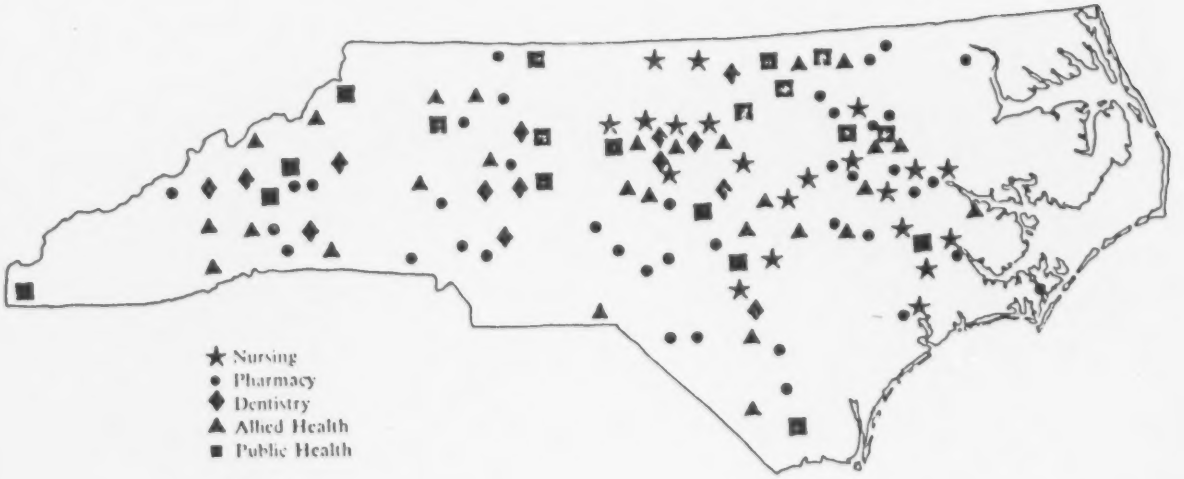
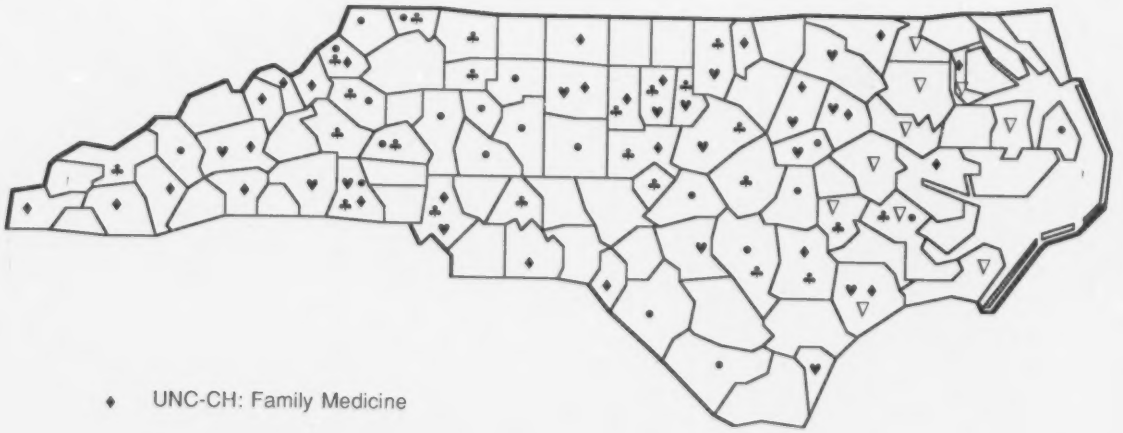


Figure 3

Location of Regular Assignments of Medical Students from UNC-CH, Duke, Bowman Gray, and ECU



♦ UNC-CH: Family Medicine

• Bowman Gray: Community Medicine

♥ UNC-CH: Clinical Clerkships or Acting Internships

♣ Duke: Family Medicine

∇ ECU: Family Medicine

Figure 4

Location of AHEC CE Programs, 1986-87

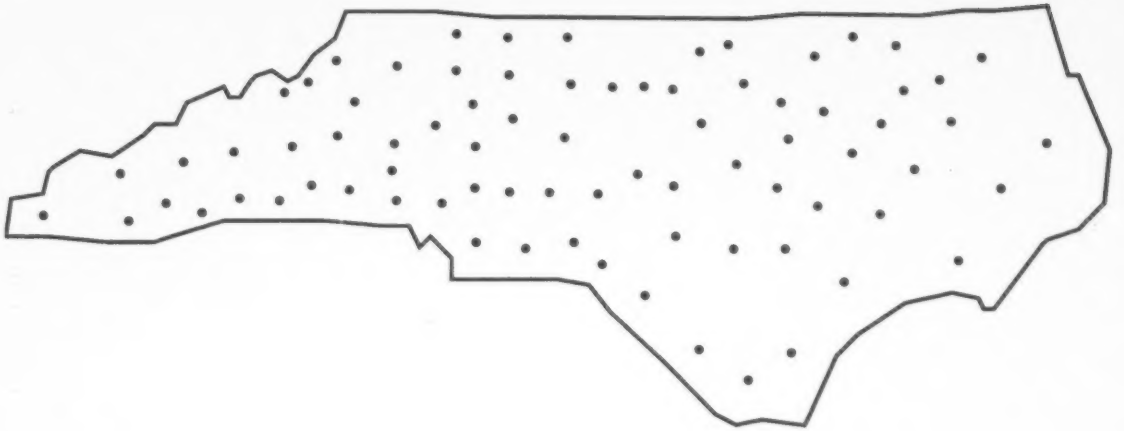


Figure 5
1972 — 1985 Median Physician/10,000 Population Ratios
North Carolina and Other United States Non-Metropolitan Counties

Source: U.S. Bureau of Health Professions Area Resource File, Sept. 1987
Note: 1984 data not available

previously been conducted are:

1. The 1978 Report of the General Accounting Office;

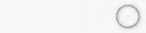
2. The 1978 Report of the Survey and Investigations Staff of the House Appropriations Committee;

3. The 1976 and 1979 Reports of the Carnegie Council;

4. The 1980 Report to the Congress by the Secretary of Health, Education, and Welfare; and

5. The 1980 Report of the Graduate Medical Education National Advisory Committee, called the GMENAC Report.

Recommendations

Specific legislation is needed to maintain and extend systems, such as AHEC which already exist, and which already have a track record of excellence. This can be accomplished by retaining the AHEC Section of Title 7 of the Public Health Service Act whose authority expires September 30, 1988. Title 7 also provides needed funding for family medicine, general medicine, pediatrics, and preventive medicine training programs which are of great importance to North Carolina.

Thank you for the opportunity to share these thoughts. I would be pleased to answer any questions. We in the AHEC Program thank you, Senator Sanford, for your support and look forward to continuing to work with The Congress in the interest of ensuring access to proper health care for all Americans.